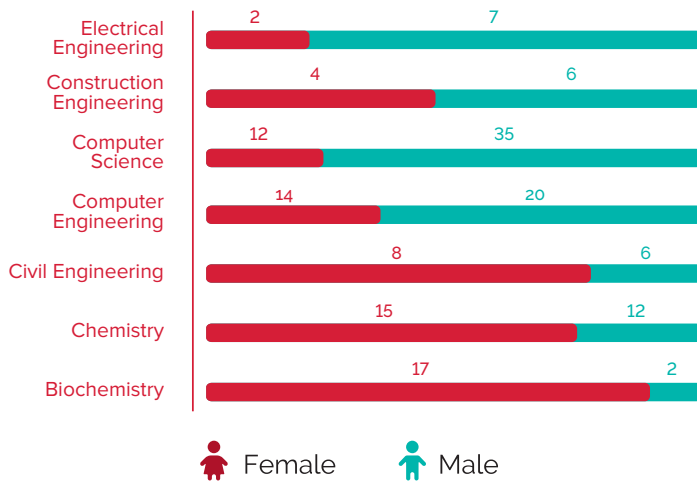


Women in STEM

Class of 2022 Gender Distribution



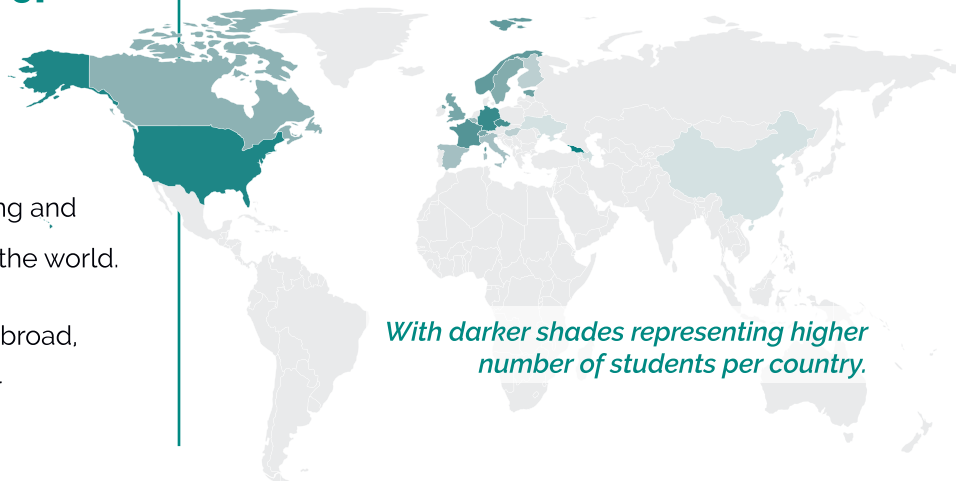
"SDSU Georgia has put immense efforts into empowering women in STEM. The gender distribution of SDSU Georgia students and graduates is a source of pride, and is the result of strategies implemented during the recruitment process. In several majors like civil engineering, chemistry, and biochemistry, the number of female graduates is higher than the number of male graduates."

THE STEM REVOLUTION FOUR YEARS IN: STATISTICAL SNAP SHOTS OF SDSU GEORGIA ALUMNI AT WORK AND STUDY

SDSU Georgia alumni are currently studying and working in **19 countries** around the world.

34% of SDSU Georgia graduates live abroad, with **66%** working and continuing their education in Georgia.

SDSU Georgia Alumni Where are they now



Also in This Issue:

- ◆ Class of 2022 Recap
- ◆ Class of 2022 Commencement Ceremony
- ◆ New board of the Alumni Association
- ◆ Statistical Snap Shots of SDSU Georgia Alumni at work and study



ABOUT SDSU GEORGIA

San Diego State University Georgia, through funding from the Millennium Challenge Corporation (MCC) and Millennium Challenge Account Georgia (MCA Georgia), offers students an exciting educational opportunity to study in Tbilisi, Georgia. Here, in the heart of the Caucasus, students are able to earn a professionally accredited, internationally recognized U.S. bachelor's degree. San Diego State University (SDSU), along with three top Georgian Universities, Tbilisi State University (TSU), Ilia State University (ISU), and Georgian Technical University (GTU), offers courses leading to science, technology, engineering and mathematics (STEM) internationally accredited bachelor's degrees. Programs offered by the university support the development of engineering, science, and technology fields, as well as Georgia's human capital capacity for economic growth.

In five cohorts, SDSU Georgia has admitted 780 students and more than 500 will graduate the programs. Georgia campus offers six degree programs:

- ✦ Chemistry/Biochemistry
- ✦ Civil Engineering
- ✦ Computer Engineering
- ✦ Computer Science
- ✦ Construction Engineering
- ✦ Electrical Engineering

American degree programs include a well-rounded liberal arts education and feature accreditations from the Western Association of Schools and Colleges, the Accreditations Board for Engineering and Technology (ABET), and the American Chemical Society (ACS). SDSU Georgia graduates will leave with a broad base of knowledge and the critical thinking skills necessary to succeed in a STEM career locally, regionally, or internationally.

Members of the SDSU Georgia community form a unique and special cohort of individuals who will earn regionally and nationally accredited and internationally recognized high-quality STEM bachelor's degrees. Additionally, SDSU Georgia students will be exposed to the same academic benefits available to their peers at SDSU's main campus in California, including state-of-the-art technology and laboratories. The San Diego State University Aztecs alumni family includes over 500,000 national and international leaders. At SDSU Georgia, we empower our students to achieve academic, professional, and personal goals.

Millennium Challenge Corporation Compact ended on July 1, 2019. Since then, SDSU has been focusing on the Sustainability initiatives to ensure continuous development of U.S. STEM degrees in Georgia.



The Newsletter of San Diego State University Georgia is published by the Dean's Office and distributed to SDSU Georgia stakeholders, faculty, students, and friends.

SAN DIEGO STATE UNIVERSITY
Adela de la Torre
President

SAN DIEGO STATE UNIVERSITY
GEORGIA
Halil Güven
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Message from the Dean

San Diego State University came to Georgia in 2014 to prepare the next generation of STEM professionals, educated to the current international standards. SDSU Georgia is a proud member of the SDSU family with ambitious achievements. During the nine years in Georgia, SDSU has raised hundreds of STEM graduates for Georgia's job market, trained more than 100 faculty, renovated the partner university facilities, and brought the innovation of international STEM accreditation to the Georgian public universities.

This year, SDSU Georgia will celebrate 113 more highly qualified STEM graduates, who will add to the achievements of over 400 SDSU graduates in Georgia, contributing to STEM fields since 2019. 66% of the SDSU Georgia graduates remain in Georgia, while 34% are working abroad or are enrolled in graduate studies at the top universities worldwide, including San Diego State University in California, Yale University, Cornell, Stanford, and many others. These gifted professionals are the best manifestation of all our efforts and support. I look forward to the Commencement Ceremony 2023, where we share with our supporters the joy of seeing this new STEM generation commence the rest of their lives and feel the pride of our contribution as their names are called and they walk off into their bright futures.

SDSU Georgia has achieved these results with the trust and help of SDSU President Adela de la Torre, SDSU Deans, Program Chairs and professors, the Government of Georgia, the Ministry of Education and Science of Georgia, the Millennium Challenge Corporation and Millennium Foundation, the U.S. Embassy, our PPPF donors, public and private partners, advisory board members, faculty and staff at the partner universities and SDSU Georgia. With all your support, SDSU Georgia has dramatically increased awareness of the importance of STEM education, prepared



qualified STEM professionals, brought international STEM accreditation to Georgia, improved the STEM infrastructure at public universities, and initiated reforms in education in the country. With the help of our partners, SDSU Georgia continues working with the partner universities to build capacity and ensure the sustainability of the STEM initiative in Georgia. We would also like to congratulate our partner universities for their continuous success in making considerable progress with the International Accreditation of their Engineering and Science programs.

Halil Guven, Ph.D.
Dean, SDSU Georgia

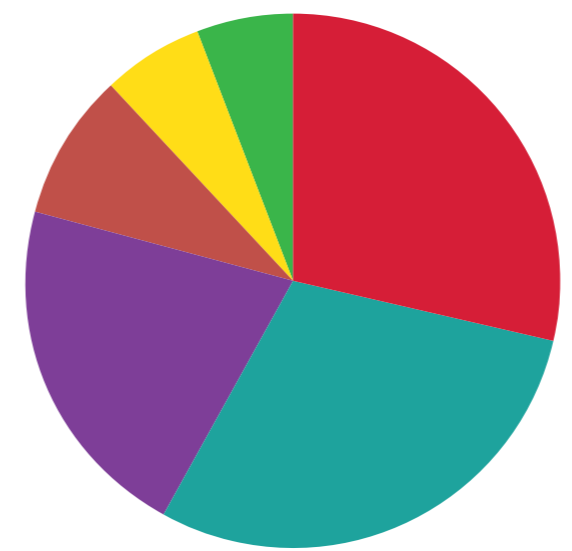
CLASS OF 2022 RECAP

The Class of 2022 alumni graduated with six different majors: 46 students graduates from Chemistry/Biochemistry programs, 47 students graduated from Computer Science program, 34 students graduated from Computer Engineering program, 14 students

graduated from Civil Engineering program, 10 students graduated from Construction Engineering program, and 9 students graduated from Electrical Engineering program.



78% of these graduates continue their graduate education at Georgian Universities and work at top Georgian companies in positions directly connected to their major. 22% of the class is pursuing advanced degrees at some of the most renowned STEM programs in the world and acquiring on-the-job experience at industry-leading firms across 12 countries.

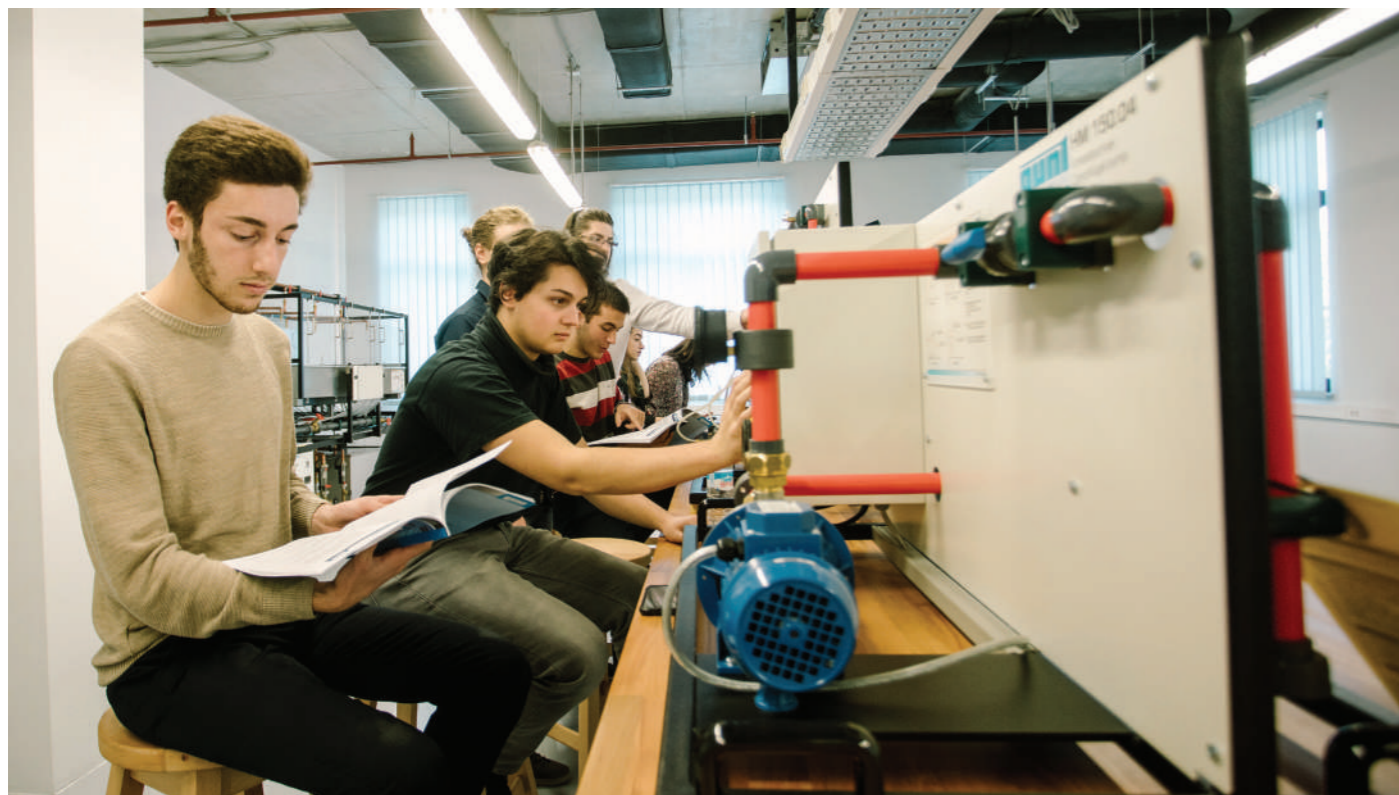


- Chemistry/Biochemistry programs
- Computer Science program
- Computer Engineering program
- Civil Engineering program
- Construction Engineering program
- Electrical Engineering program

Chemistry/Biochemistry graduates pursuing graduate education are currently enrolled at prestigious institutions in Georgia, Europe and the US. It is especially important for Chemistry/Biochemistry students to successfully enroll in advanced degrees after graduation. The list of the universities include: the Berlin School of Business & Innovation; Caucasus University; Emory University; Georgian Institute of Public Affairs; ISU; KU Leuven; University of Gustave Eifel; Ludwig Maximilian University Munchen; Rutgers; SDSU; University of British Columbia; Tufts; UC San Diego; University of Toronto; Uppsala; and Yale. These graduates are pursuing master's degrees and PhDs in such dynamic specialties as Health Care Administration, Environmental Policy, and Applied Genetics. Most of this group have also begun work, especially at domestic and international pharmaceutical and chemical firms in research and regulatory specialist roles. These firms include Bristol Myers Squibb; CPI Georgia; PharmaLex; and Sostie Inc. Some are in public service, as with LEPL

Levan Samakharauli National Forensics Bureau and Georgia's Ministry of Internal Affairs. Other employers include Efes; Evintel; Rondo Food; and the Petre Melikishvili Physical & Organic Chemistry Institute.

The largest disciplinary group within the class, its **Computer Science** graduates have had overwhelming success getting hired right out of university, especially in software development. Among these employers are: EPAM Systems; Bank of Georgia; British Petroleum; DataArt; TBC; Coinmania; Credo Bank; Flat Rock Technology; LeaderBet; Liberty Bank; Making Science; Metad; Microsoft; Space International; Space Neobank; and Webiz. Others have entered various specialist and managerial roles at Apollo Digital; Ergo-Pro; Egeekowl; GTU; Ilia Vekua Sukhumi Institute of Physics & Technology; Lubar; Jotform; Redberry; and TBC. Our Computer Science graduates are also pursuing advanced degrees in their fields in Georgia and abroad at Business & Technology University; Czech Technical



University Prague; Free University of Tbilisi; GTU; INSA Rennes; Northern Kentucky University; TSU; and UC-San Diego.

Our **Computer Engineering** graduates have likewise benefitted from immediate employability, and in similar roles centered around software development, engineering, and testing. Among them: Aiolane; Alta; Amazon; AzRy; Bank of Georgia, BCC Elektro-Specialzaken BV; CodeImpact BV; Exactpro; Exadel; Fina; Georgian Financial Telecommunication Company; Making Science Quantori; Social Boost; Soft Master; Space International; TBC; Xunison; Zailab; and Lineate. These names emphasize the international marketability of an SDSU education. Our newly minted Computer Engineers are also getting advanced degrees at SDSU Main Campus, the Technical University of Berlin; the Technical University of Munich; and Villanova University in Pennsylvania.

The smallest discipline group, our Class of 2022 **Electrical Engineering** graduates are nevertheless among our busiest. Of just nine graduates eight are fully employed, and four enrolled in graduate programs. Our Electrical Engineers are working as power engineers at Cisco and software developers at Exactpro, Georgian Railway, and Postred. Two are teaching and research assistants at Purdue and Kutaisi International Universities, respectively, and one a quality assurance analyst at

Redmed. Four are likewise enrolled in master's and PhD programs at Business & Technology University; Northern Kentucky University; Purdue; and RWTH Aachen.

Our Class of 2022 **Civil Engineering** graduates can be found in Georgia, Scandinavia and North America. They are working at such engineering consultancies as Construction Management Company; Hydrodiagnostics; MySun Technologies; and TeamTwo. Others are doing software development and coordinating projects for Skillwill and Marcogroup. One is a hydraulic modeling specialist for the U.S. Environmental Protection Agency. These same students are meanwhile pursuing advanced degrees in hydropower development, civil and environmental engineering, and urban studies and planning at the Norwegian University of Science and Technology, the University of Helsinki, Cornell University, and Stanford University.

Meanwhile, our **Construction Engineering** graduates have been swiftly employed in Georgia in work vital to the country's commercial, transport, and energy infrastructure. Their employers include APM Terminals Poti; BP; JEU Group Road Construction; LMC, and Paybox. These graduates exemplify the direct impact of the SDSU Georgia project on the development of Georgia's domestic economy and infrastructure.



On May 31, 2022, SDSU Georgia held a commencement ceremony for its largest graduating cohort of 160 students at the historic Rustaveli National Theatre. The ceremony is a custom in which diplomas are conferred to members of the graduating class by the university president.



CLASS OF 2022 COMMENCEMENT CEREMONY

The ceremony was attended by a delegation from San Diego State University headed by the ninth permanent president of SDSU, Dr. Adela de la Torre, and which included CSU Trustee Mr. Adam Day, representatives of the Government of Georgia, the US Embassy, and the Millennium Foundation, rectors of the three partner universities (Tbilisi State University, Ilia State University, Georgian Technical University), SDSU Deans, Advisory Board members of SDSU Georgia, Public Private Partnership Fund (PPPF) donors, and other partners of SDSU Georgia. Friends and families of the graduates were also in attendance.



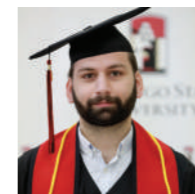
Class of 2022 graduates enter the workforce ready to contribute to the sustainable development of the country. It is worth noting that 54% of the Class of 2022 completed their studies with honors, and 45% of the class are women. This latter statistic is the result of active measures implemented by SDSU Georgia to

increase the involvement of women in STEM fields. Graduates of San Diego State University are equipped with all the skills and knowledge necessary to contribute to the development of Georgia's economy and solve global problems through innovation.

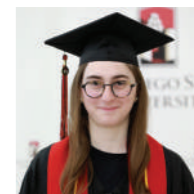
SDSU GEORGIA HAD SIX 4.0 GRADUATES IN 2022:



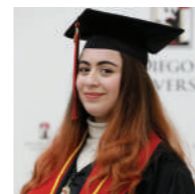
Nino Kacharava
Civil Engineering



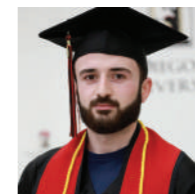
Devi Oniani
Chemistry



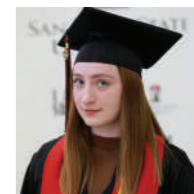
Marika Sarishvili
Chemistry



Nia Iskandarova
Civil Engineering



Amiran Janashvili
Civil Engineering



Natali Maisuradze
Civil Engineering

In recognition of their outstanding performance, these graduates have received fully funded admission to the best universities in the world for their master's and Ph.D. studies. Congratulations to them for their achievements!



MEET THE NEW BOARD OF THE ASSOCIATION



Nino Makasarashvili
Alumni Association President
Chemistry Graduate | Class of 2022

What made you want to join the Alumni Board of Directors?

In addition to receiving a high-quality education and developing professional skills at SDSU Georgia, I also learned the importance of being an active student and responsible member of the community. As a member of the Alumni Board of Directors, I aim to establish a robust network of SDSU Georgia alumni to facilitate knowledge-sharing and career development assistance.

How has SDSU Georgia impacted your life?

SDSU Georgia has been offering exceptional educational opportunities to local students for several years. I consider myself fortunate to have been one of the students who opted for a STEM field and became a part of SDSU Georgia's esteemed academic community.

Where do you see yourself in five years?

In five years, I aim to graduate from the Joint Doctoral Program of San Diego State University and University of California San Diego.

What is your most important goal for the Alumni Association?

My goal is to foster stronger connections between alumni, both within and beyond my field, and collaborate on ways to effect positive change within Georgia's scientific and industrial communities.

What advice would you give to students who are about to graduate from SDSU Georgia?

Don't hesitate to dedicate your time and effort towards achieving your goals, but also take a moment to consider where you see yourself in your career 5 or 10 years down the line and if you would enjoy it.

Interview with the SDSU Georgia Alumni Association President Nini Makasarashvili

Please share your life updates since graduation.

After completing my bachelor's degree in chemistry, I decided to pursue a doctoral degree and am now a graduate student at San Diego State University, conducting research at the intersection of biochemistry and physical chemistry. Additionally, I work as a teaching associate, using my passion for research to educate and contribute to the advancement of scientific knowledge.

Interview with the SDSU Georgia Alumni Association Vice President Mariam Kantaria

Please share your life updates since graduation.

I am proud that my portfolio includes projects that drive the development of Georgia. Some of the projects I have led as assistant project manager are the Poti expansion project and Poti port rehabilitation project. Currently, as a BP employee, I contribute to the maintenance of pipeline infrastructure in the Azerbaijan-Georgia-Turkey (AGT) region. I am glad to be part of a community making the energy industry more efficient locally and globally.

What made you want to join the Alumni Board of Directors?

I have faced many challenges and roadblocks during my career. I have always had the desire to share my experiences with other young professionals, and the SDSU Alumni Association is just the platform for this!

How has SDSU Georgia impacted your life?

Learning at SDSU was a challenging journey. STEM has shaped my technical knowledge and helped me build a unique skill set, mindset, and ability to learn and adapt fast. My experience and skills have been acknowledged by the Project Management Institute. I became the youngest PMI-ACP® and PMP® in Georgia. I am planning to become a certified Business Analyst this year.

Where do you see yourself in five years?

I want to do more interesting projects, especially in international environments. But my primary goal is to serve my country with my profession. There is a lot of work to be done to make the construction industry one which can provide a decent working environment for Georgian citizens. I am contributing to the development of this industry in Georgia, and hopefully my goal will be reached.

What is your most important goal for the Alumni Association?

My most important goal for the Alumni Association is to promote knowledge-sharing, help SDSU students and



Mariam Kantaria
Alumni Association Vice President
Construction Engineering | Class of 2022

alumni take the correct path and pursue their dreams.

What advice would you give to students who are about to graduate from SDSU Georgia?

I would advise SDSU students to always know the worth of their time. Setting goals and using your time efficiently to reach them is the way to success. Courage, discipline and strength of one's character can deliver outstanding results. But, most importantly, having a sense of purpose should lead them to always do what is right, and to always care for others!

Interview with the SDSU Georgia Alumni Association Board Member Davit Enukidze

Please share your life updates after graduation.

SDSU had a huge impact on me. It helped me to be much prepared while taking the first steps in my professional career. That is why I think that my life after graduation has been quite interesting, with lots of new opportunities and challenges. I got a job at one of the largest Georgian construction companies, Caucasus

Road Project Ltd, even though I did not have much experience. From the very first day, I was involved in quite a big project, which consisted of constructing two reinforced-concrete steel bridges in Yerevan, Armenia, each with a length of 252 m. The task was not easy at all, as I had to communicate with lots of people from different countries, like Turkey, Spain, France, Armenia and Georgia, of course. Delivering materials to the job site was quite challenging as well, because the steel materials for the bridge were bought and imported from Turkey. Then, we assembled all the parts in Georgia



Davit Enukidze
Alumni Association Board Member
Civil Engineering | Class of 2021

I still feel myself to be a member of the SDSU family. At the same time, being an Alumni Board Member is a new experience for me and will help me to discover more about myself from another perspective. Lastly, I do believe that sharing the experience I've obtained at university will help the next generation entering postgraduate life, which is the real world, with all its challenges and opportunities.

How has SDSU Georgia impacted your life?

University life had a huge impact on me in all aspects. It helped me to develop more as a person, develop communication skills, obtain knowledge and lay the foundation to become a professional. University helped me to see how the real world looked, and taught me to set smaller goals and achieve them. The path would be long and difficult with lots of success and failure, but it is not important that someone may fail in a certain task. It is only important that one can overcome it and keep going forward.

Where do you see yourself in five years?

In five years, I see myself continuing to grow in my career and taking on more responsibility within the company by leveraging the expertise I've gained working in this industry. Of course, career is important, but one must not forget about family. That is why I am also looking to start a family in the upcoming years. Family and career do not interfere with each other. Balancing family and career is the key step towards being a successful and strong professional and person. A strong family will always overcome any kind of difficulty.

What is your most important goal for the Alumni Association?

My most important goal for the Alumni Association is to share my experience with undergraduate students, and to offer them professional and personal support such as professional networking events and career services, continuing education opportunities, and how to plan a future career and take the first steps towards it. Also: reunions to connect people, increase the engagement of students and together advance the main goal of the association.

What advice would you give to students who are about to graduate from SDSU Georgia?

Do not be afraid of the postgraduate period, or of making mistakes. Practice makes perfect. Be open to changes and discover yourself. Use each and every opportunity to learn as much as possible.

and exported the ready beams to the job site. This big project was successfully concluded in July 2022, and I was able to attend the opening ceremony. From that very first project I learned a lot. It helped me to explore my profession in more detail, and helped me to grow both as a person and as a professional in the field of civil engineering. The interesting and challenging work did not stop at this project. Our company is also focused on landslide treatment, and I was involved in several different and challenging design-build projects for recent landslides. In August 2022, I was given the task of preparing working drawings and other project documents for the landslide which occurred in Kojori near Iunkerta Street. The project included construction of an 18-meter-long and 6-meter-high reinforced-concrete retaining wall, which was anchored into the soil. The response from the technical experts was positive, and we successfully opened our project in September 2022. Currently, we have two big projects: Construction of the new bridge over the river Rioni, and rehabilitation of 16 landslide areas located on the Zestafoni-Chiatura-Sachkhere highway. For both projects, I am responsible for preparing the drawings and all other necessary documents and submitting them to the technical experts.

What made you want to join the Alumni Board of Directors?

Joining the Alumni Board of Directors would give me an opportunity to maintain my connection with the university, and even though I have already graduated,

Interview with the SDSU Georgia Alumni Association Board Member Tiko Vacheishvili

Please share your life updates after graduation.

I was accepted to SDSU's Construction Engineering program in Georgia in 2017. Four years were as difficult as it could get for an engineering major. Fortunately, with the help of professors and students I somehow overcame the obstacles and graduated magna cum laude.

After graduation, I enrolled in a master's program "Project and Contract Management in Construction Works" at Politecnico Di Milano (Milan Technical University), which is one of the highest-ranked universities in the field of construction and architecture. In 2022, I defended my master's thesis ("Soviet era still overshadows the construction industry in Georgia") and graduated summa cum laude. Currently, I am working at LSG Solutions as a Construction Project Manager's Assistant. LSG Solutions provides construction management services for civil, industrial and infrastructural projects.

What made you want to join the Alumni Board of Directors?

By serving on the Alumni Board, we as former students can use our knowledge, experience, and expertise to help support the university in various ways. For example, we may help to organize fundraising events, mentor current students, participate in career development programs, or provide feedback to the university administration on various issues.

Additionally, joining the Alumni Board allows us to stay connected with our fellow alumni, build new relationships, and expand our professional networks. This can lead to new job opportunities, collaborations, and partnerships.

Furthermore, serving on the alumni board can be a rewarding and fulfilling experience, as it provides us with the opportunity to make a meaningful impact on our university and community. By working alongside other alumni, we can help shape the direction of the institution and ensure that future generations of students have access to the same opportunities we did.

How has SDSU Georgia impacted your life?

Besides my education, SDSU Georgia has contributed

Tiko Vacheishvili
Alumni Association Board Member
Construction Engineering | Class of 2021



to my professional life and made me resilient to the obstacles in the field. During my years at SDSU Georgia I was able to work with incredible students whom nowadays I call my friends. As for the future, I definitely see myself working in a construction field, mainly in management.

What is your most important goal for the Alumni Association?

Alumni associations serve as a link between an institution and its graduates. They play a vital role in maintaining the connection between alumni and their alma mater, fostering a sense of community, and supporting the institution's mission and goals. The primary goal of an alumni association can vary depending on the institution's priorities and objectives.

What advice would you give to students who are about to graduate from SDSU Georgia?

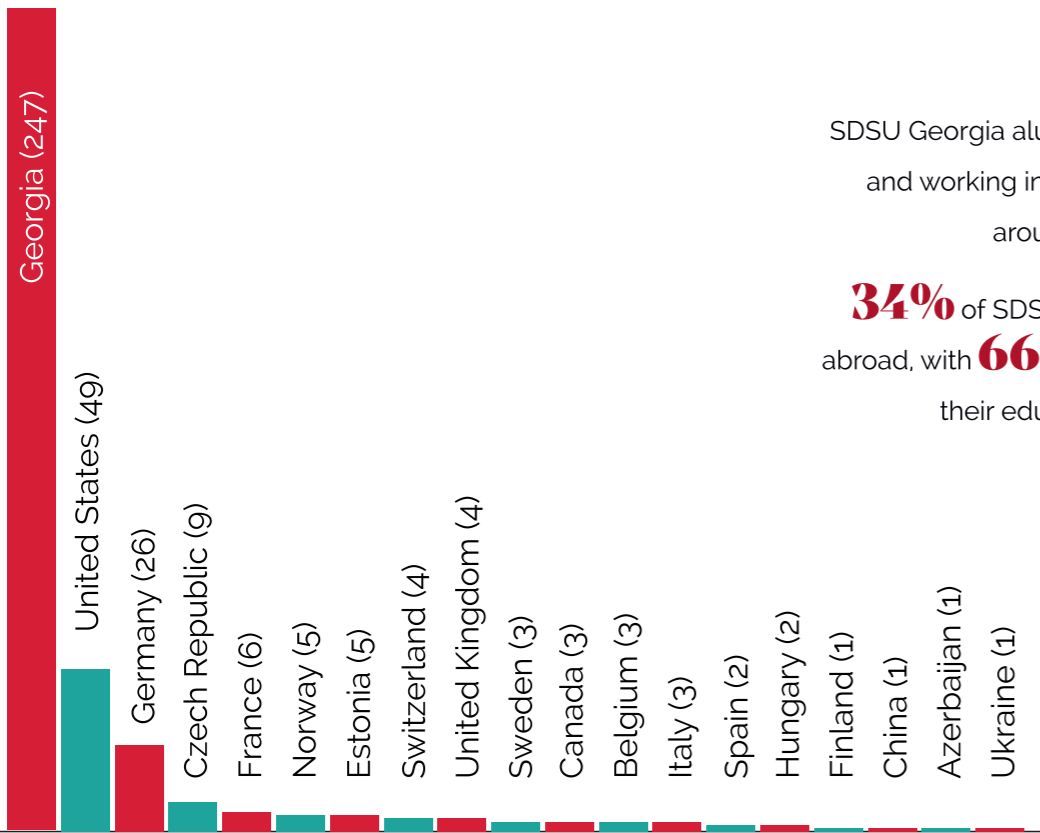
Firstly, congratulations on reaching this milestone! Take some time to reflect on your achievements throughout your time in college. Celebrate your successes, and recognize how far you've come. This will help you build confidence and prepare for your future endeavors. Whether you're planning to enter the workforce or continue your education, start preparing for your future now. Build your resume, research job opportunities, or start studying for graduate school entrance exams. This will give you a head start and make the transition smoother. Graduation is just the beginning of your journey!

THE STEM REVOLUTION FOUR YEARS IN:

STATISTICAL SNAPSHOTS OF SDSU GEORGIA ALUMNI AT WORK AND STUDY

SDSU Georgia graduated its fourth cohort in May 2022, with the fifth cohort graduating this year. This article will give an overview of interesting data pertaining to the work, travel, and advanced study of members of the Classes of 2019, 2020, 2021, and 2022 collected by the Alumni Outreach and Engagement team through alumni surveys and LinkedIn analytics.

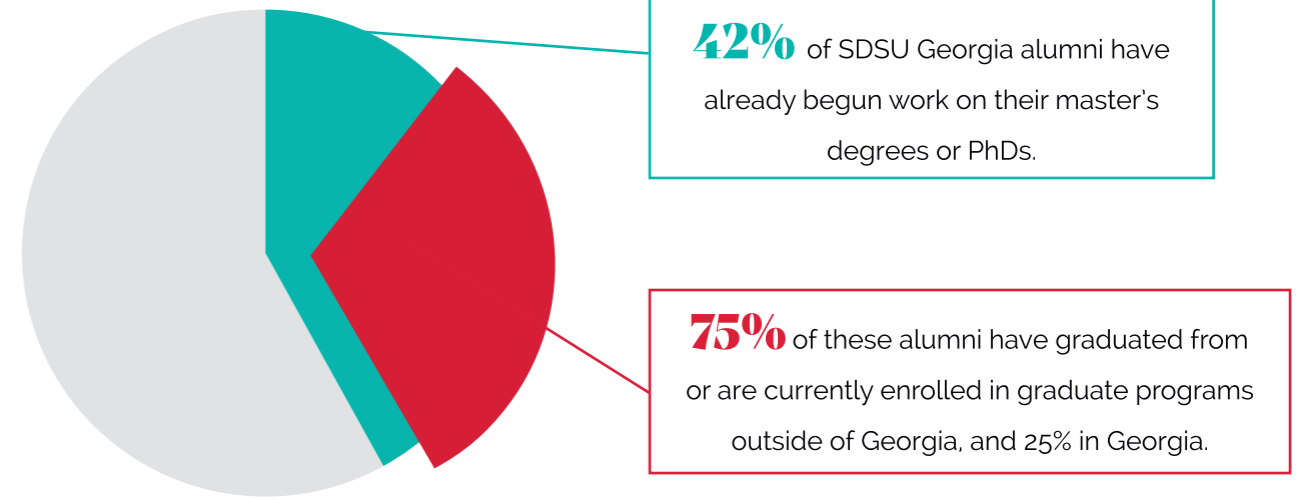
Did you Know?



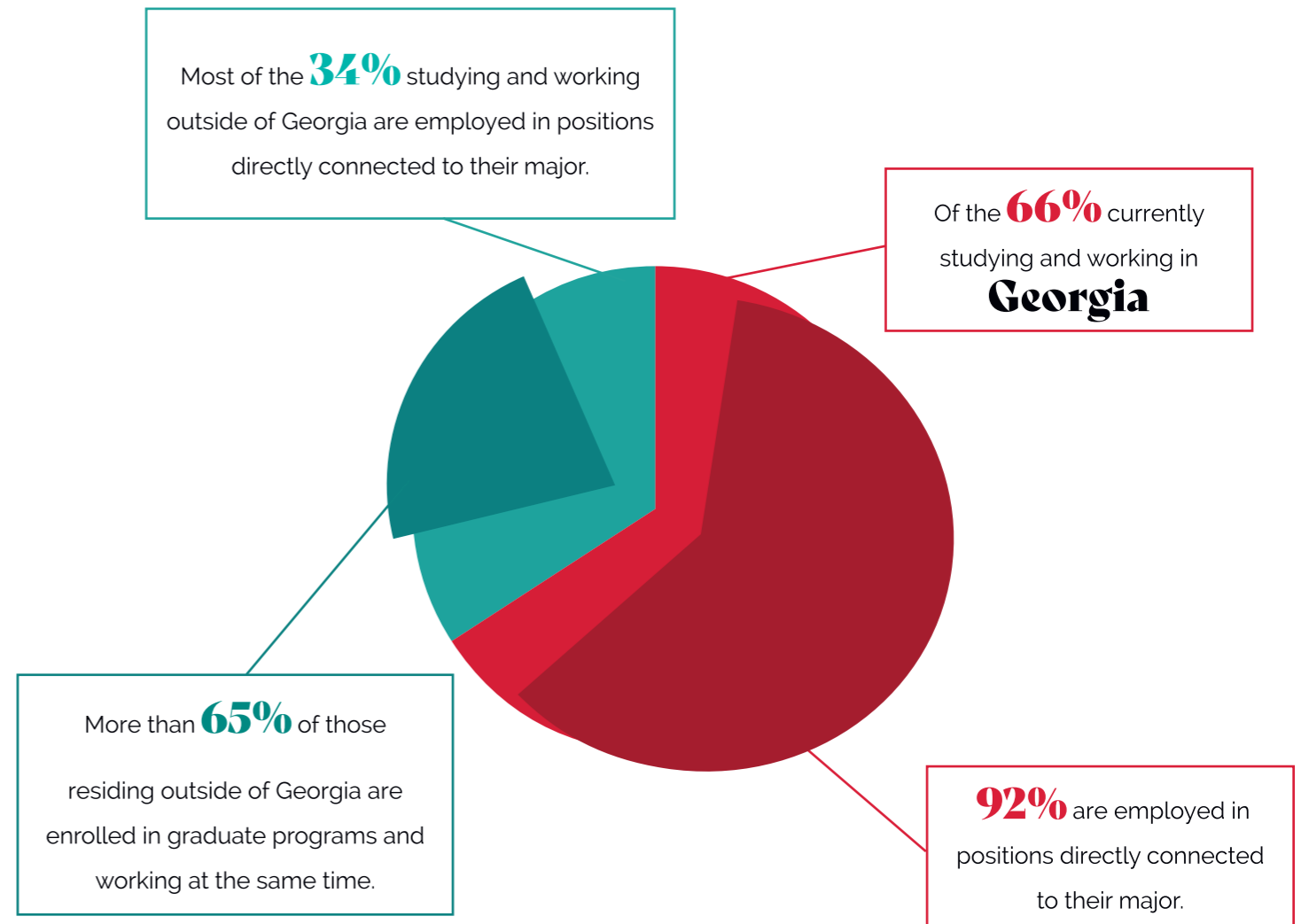
SDSU Georgia alumni are currently studying and working in **19 countries** around the world.

34% of SDSU Georgia graduates live abroad, with **66%** working and continuing their education in Georgia.

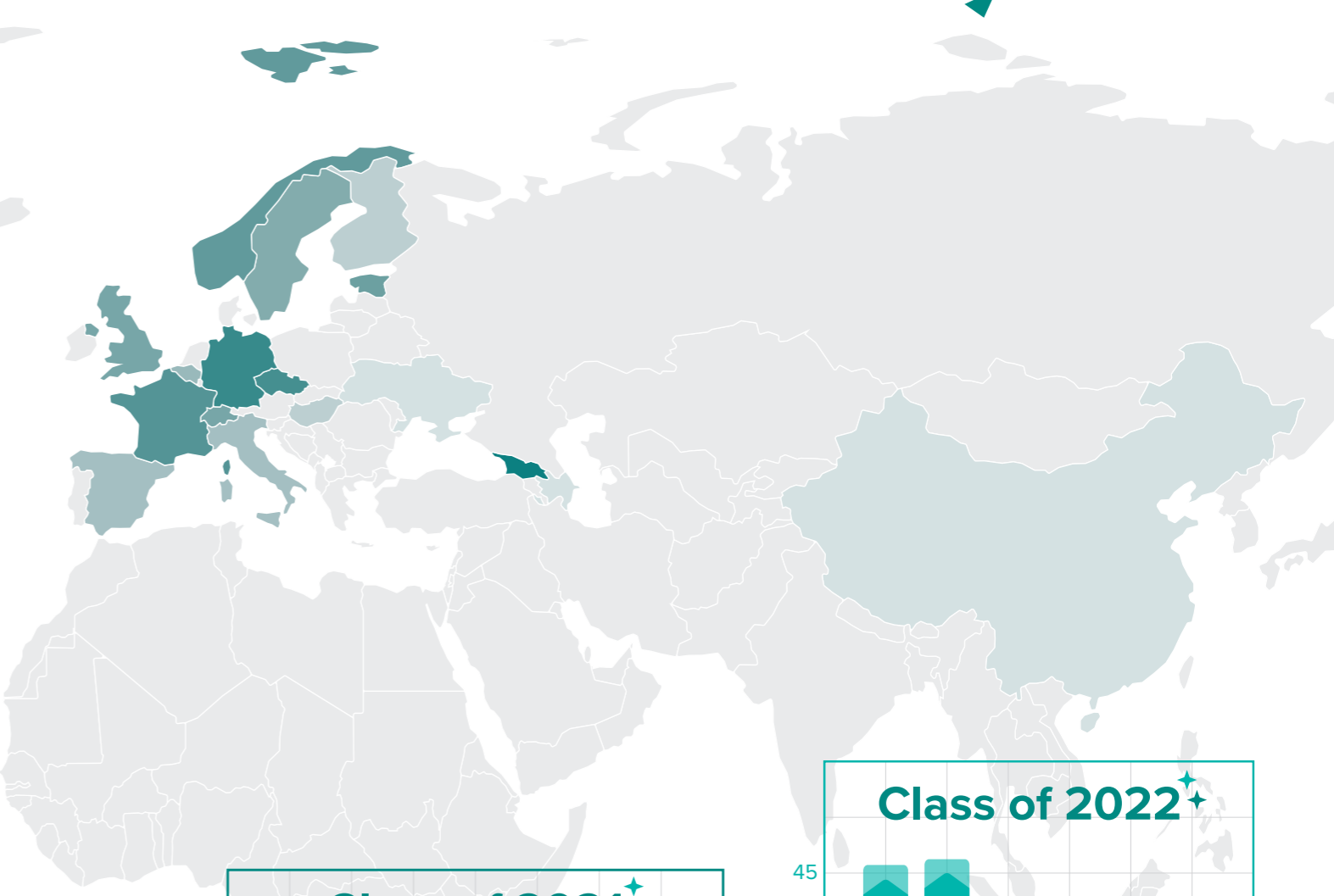
GRADUATE STUDIES



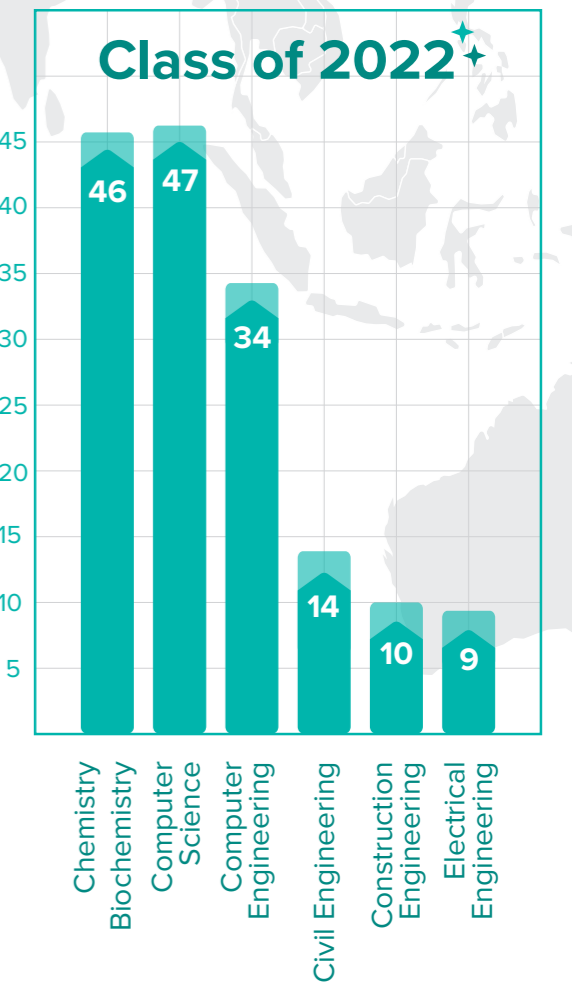
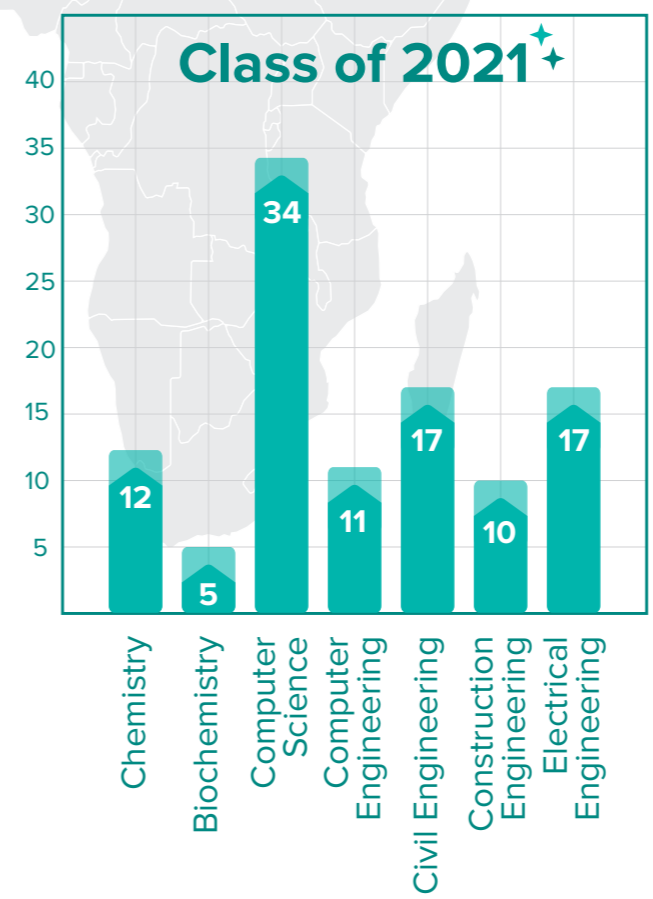
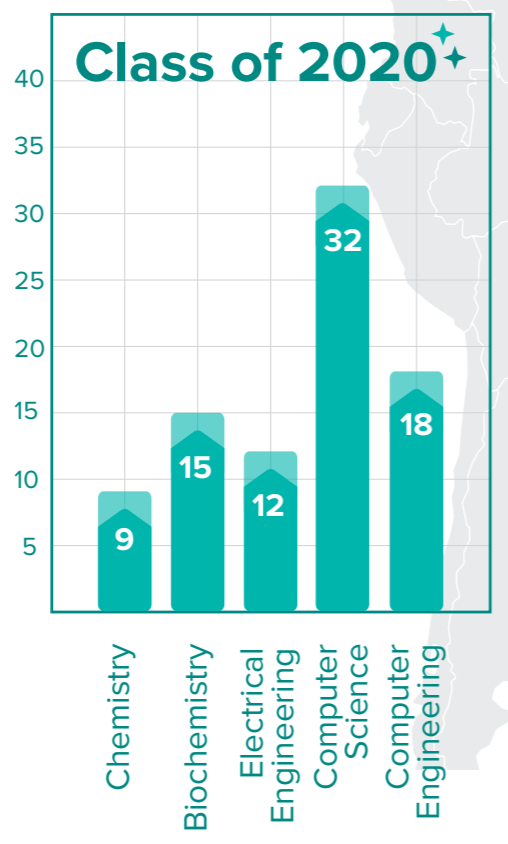
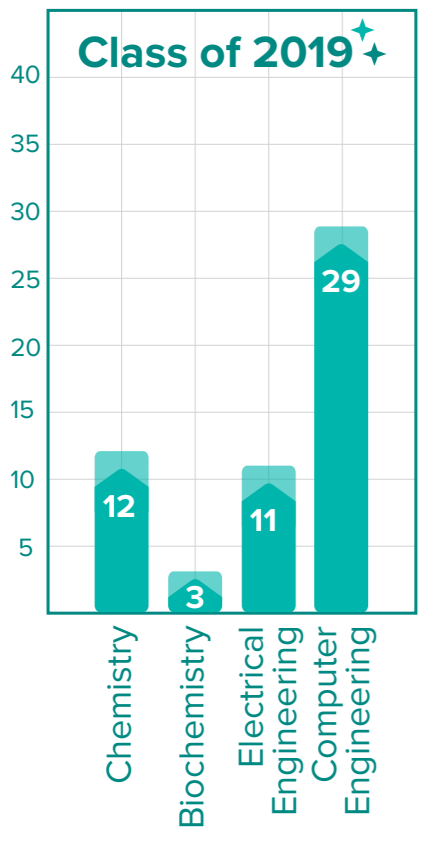
EMPLOYMENT



SDSU Georgia Alumni



With darker shades representing higher number of students per country.





Luka's journey at Amazon started in July 2022 after graduating from SDSU Georgia. "I had no idea what programming was until I started pursuing Computer Engineering at SDSU Georgia," he says. "Now, when I look back, I feel so fortunate that I chose such an in-demand profession which I also really enjoy."

In the fall of 2021, Luka participated in SDSU Georgia's student exchange program, which gave him an opportunity to continue his studies and graduate from SDSU Main Campus. After arriving in California, he decided to apply for a software-development engineering role at his dream company, Amazon.

The Amazon interview process was long and competitive. It consisted of several rounds such as coding and work style assessments, testing for both technical and soft skills, and the candidate's alignment with Amazon Leadership Principles. "If you successfully pass those, you're invited to the final round, which consists of three back-to-back 45-minute interviews where you have to solve software problems and answer behavioral questions in front of Amazon engineers," explains Luka. "I was in San Diego in November when I got an offer. I was extremely happy that the time and energy I put into this process paid off."

"I had never thought about living and working in Manhattan," he continues. "Indeed, you never know what will happen in your life, but it's crucial to have long-term goals and to do your best to achieve them despite the challenges you'll face along the way. One of the best things about New York is that it's so diverse and offers so much variety. You never run out of new things to do or neighborhoods to explore; it's like visiting different countries all in one city. Here, you can taste food from all over the world, visit the world's best museums, and watch incredible Broadway shows."

Luka plans to spend the next few years at Amazon as he grows professionally. "The scale at which the company operates is insane," he says. "We support 20 marketplaces around the world with over 300 million customers. We say that every day at Amazon is 'Day One,' and that always holds true as you're never done learning."

Luka is part of the Personalization Org, and his team is responsible for the recommendations each and every Amazon customer gets when they log into the Amazon website or application based on their previous purchases or interests. "Amazon has been developing internal tools over the past decades, and it feels like you're in a completely different world of software," he says. "Moreover, all of our systems are supported by AWS (Amazon Web Services), so I've gained a lot of exposure to it since I joined the company."

Luka likes the team culture and the people with whom he interacts. "They are all super talented and friendly, and eager to share the knowledge they've gained throughout their careers at Amazon," he says.

Luka Emrashvili
Computer Engineering
Class of 2022

Events

1ST BOARD MEETING

SDSU Georgia Alumni Association hosted its first joint meeting with alumni and current students in February, 2022. Chaired by the newly elected association president Nini Makasarashvili '22, the purpose of the meeting was to elucidate the principal objectives and future plans of the association. The main business of the association is to facilitate the career development of SDSU Georgia alumni and students by engaging

industry professionals in the sharing of knowledge and experience. Among the planned events are a guest speaker series featuring alumni and field specialists, as well as job market information sessions and grad school workshops. A formal alumni reunion is also envisioned. Rounding out the leadership of the association are Vice President Mariam Kantaria '22, and auxiliary board members Tinatin Vacheishvili '21 and Davit Enukidze '21.

Nino Chkhartishvili'22 spoke over zoom with the SDSU Georgia current students and alumni on the topic of "Sustainable Urban Development and Transportation challenges" on November 3, 2022. Nino is working on her Master's of Science in Urban Studies and Planning at the University of Helsinki. Over the course of her presentation she also covered graduate program opportunities and challenges of living in a foreign, non-English-speaking country.

Nino explained the positive implications of sustainable urban development on the environment, the economy, and on quality of life. She described the ways in which informed urban planning can ease congestion, keep housing prices in check, preserve historic places, and facilitate recreation. She identified various obstacles to sustainable urban development, particularly the conflicting priorities facing the leaders of growing and transitioning cities. She cited as a recent success story the renovation of Tbilisi's own Chavchavadze Avenue with its accompanying increase in public transport ridership.

Nino also shared her perspective on graduation, emphasizing the value of setting priorities and making a personal schedule. This included her take on "gap years" between graduation and the next stage of



work and study. She reviewed foreign postgraduate admissions exams and qualifications.

Finally, she shared some impressions of her foreign graduate school experience, especially the challenges of the language barrier and unfamiliar lecture topics.

Above all, she advised students to dream big, and to not be afraid to ask for help!

Georgian Student Chapter of the American Chemical Society (ACS GSC) held a Grad School Webinar Series for SDSU Georgia's chemists pursuing advanced degrees in October 2022. In collaboration with the SDSU Georgia Alumni Board, five distinguished guests shared their experience of grad school, and their hard-earned expertise on the application process, studying abroad, and securing scholarships. The Series ran from October 3rd through 13th, and featured as presenters

five SDSU Georgia alumni enrolled in graduate programs at foreign universities.

The Grad School Webinar Series exemplified the practical benefits of formal alumni networks, especially their potential to foster mentorship. Rising graduates continue to benefit from the wisdom and advice of earlier pioneering cohorts as they navigate their careers and postgraduate studies.

HERE ARE THE QUOTES FROM THE ACS GSC BOARD MEMBERS ON THE IMPORTANCE OF SUCH EVENTS:

Giorgi Vacheishvili: The Webinar Series has given the students a convenient and cost-effective way to receive knowledge and suggestions from more experienced SDSUG alumni.

Kesaria Tevdorashvili: Information shared by alumni has helped seniors navigate the graduate school application process successfully.

Givi Kadagishvili: SDSUG alumni have further paved the way for future generations of scientists from Georgia.

SDSU Georgia

Grad School Webinar Series

- Natia Inadze - Friedrich-Schiller-Universität Jena, Germany
Funding - DAAD Scholarship for Master Studies
- Devi Oniani - Yale University, USA
Funding - Ph.D Scholarship
- Elene Ivaniashvili - Tufts University, USA
Funding - Ph.D Scholarship
- Ninutsa Tabagari - University of Konstanz, Germany
Funding - Self-Funded
- Nini Makasarashvili - San Diego State University, USA
Funding SDSU & International Education Centre

Vasil Metreveli: The Grad School Webinar Series has successfully spread information about the journeys to graduate school.



Mariam Kantaria'22 gave a talk on project management and business analysis certification. Mariam lives in Georgia, where she works for BP as a maintenance planner. Herself a certified PMI Agile Certified Practitioner, Mariam expounded on project management methodologies and distinct knowledge areas. She walked students through the different kinds of certifications, the organizations which test for and issue them, and their prerequisite criteria.

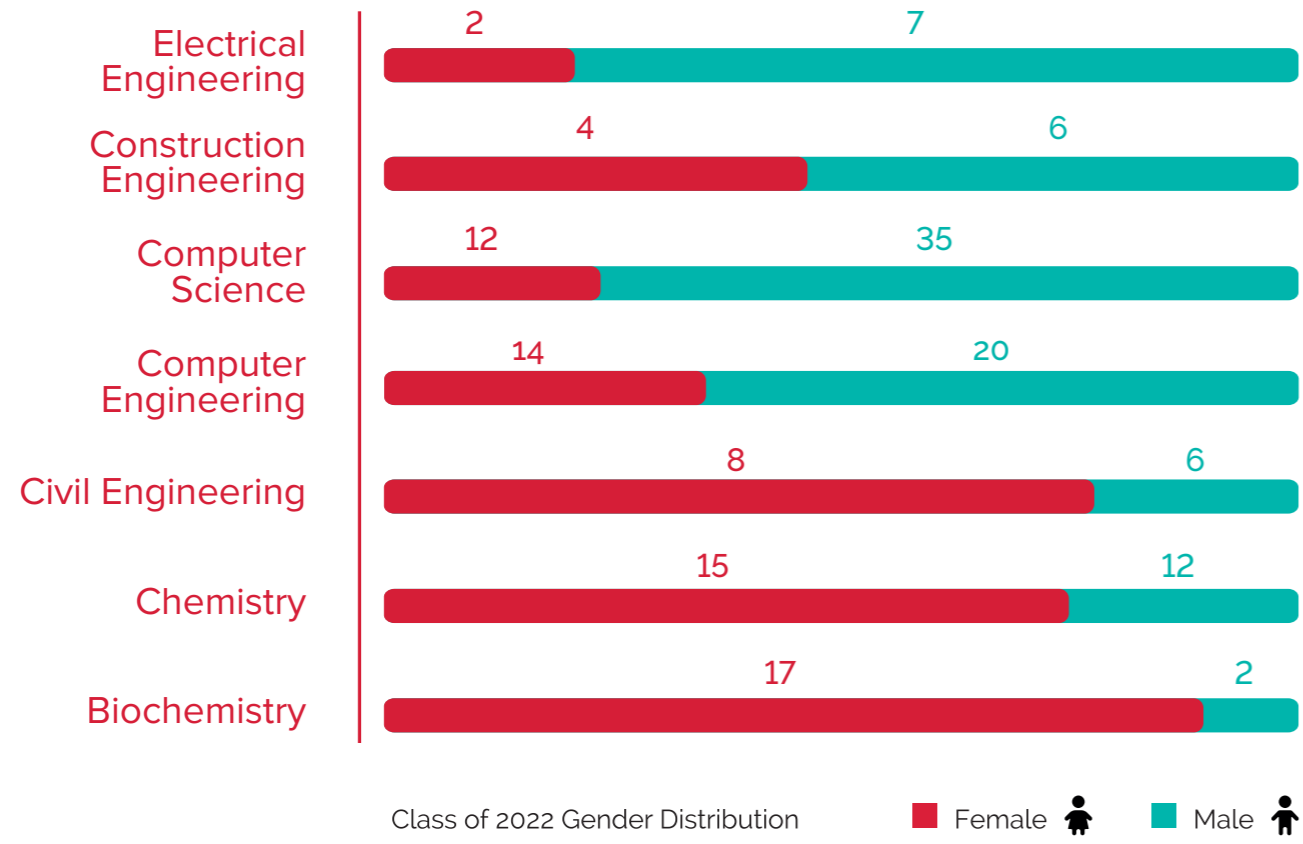
She shared tips for studying and passing these exams. The balance of her presentation was given over to general advice on setting goals for oneself and creating action plans, finishing with a Q&A session.

WOMEN IN STEM

SDSU Georgia has put immense efforts into empowering women in STEM. The gender distribution of SDSU Georgia students and graduates is a source of pride, and is the result of strategies implemented

during the recruitment process. According to statistics provided by the Ministry of Education of Georgia in the National Strategy Document for 2022-2032, in 2018, only 16% of the Science, Technology, Engineering, and Math graduates were women. According to the same document, women mainly graduate from the humanities, education, and healthcare, which decreases their opportunities of getting involved in higher-income economic activities. However, SDSU Georgia's recruitment strategy managed to minimize the effect of the existing prejudice that STEM professions are mainly for men. Among the most recent graduates of SDSU Georgia, the Class of 2022, 45% were women, which is tangibly higher than the country average of 16% mentioned above.

In several majors like civil engineering, chemistry, and biochemistry, the number of female graduates is even higher than the number of male graduates.



To highlight the success of our female graduates, this section features the stories of several. They describe their studies, their travels, and the fascinating and vital work they do. They also share lessons learned with some considered advice and encouragement to the next wave of female STEM professionals.

Ana Tomash
Electrical Engineering
Class of 2020

After graduating from SDSU Georgia, Ana started work as a biomedical engineer at EVEX Clinics. One of her responsibilities was to take care of the medical equipment in 33 clinics around Georgia, which involved extensive travel in rural areas. "This experience helped me build a network in the biomedical engineering society and gave me a perspective on how it operates in Georgia," she says.

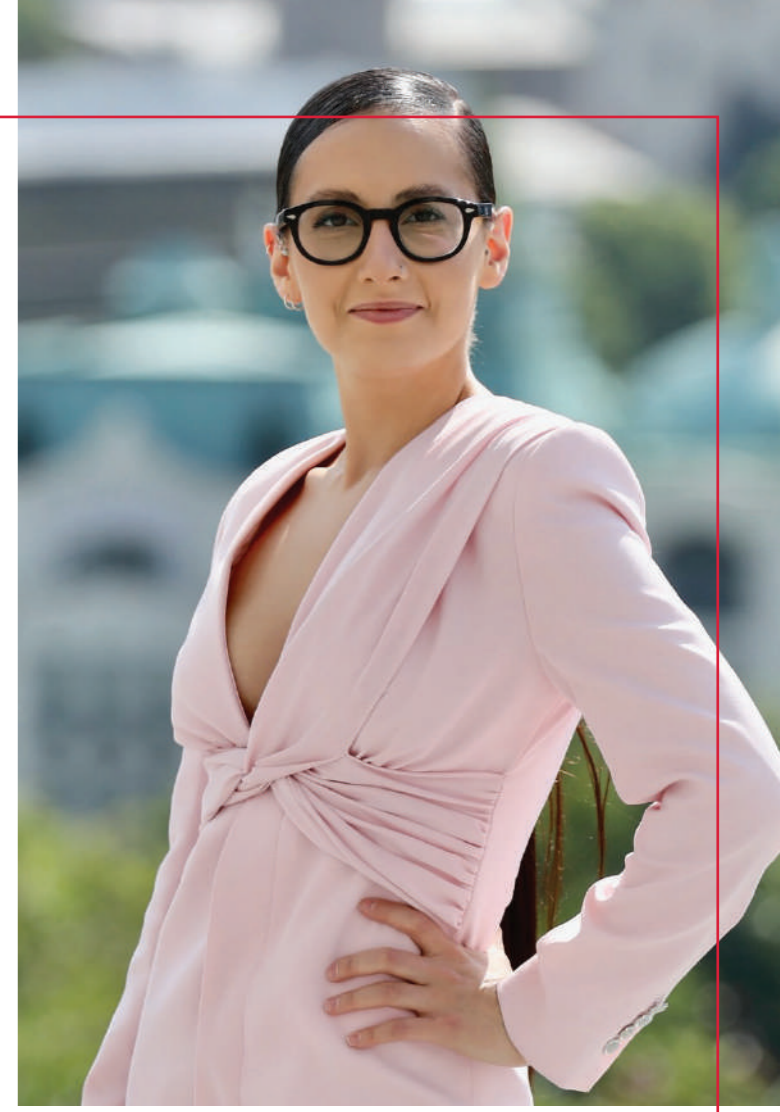
She also worked as a software engineer at G&T Service. "I am deeply grateful to the company and my supervisor Nika Jandieri for giving me the freedom to learn, grow and gain self-confidence in the field," Ana says of her time there.

Presently, she is pursuing her PhD in Biomedical Engineering at the Illinois Institute of Technology in Chicago, and working as a graduate research assistant at the Medical Imaging Research Center, in the Magnetic Resonance Imaging Lab. Her project aims to find the associations between the brain disease arteriolosclerosis, which affects small vessels in the brains of mostly elderly people, and water diffusion abnormalities in the brain.

"This work promises to be translated into the in-vivo classifier model for early diagnosis of arteriolosclerosis," says Ana. "To generate the analysis, I use in-vivo MRI images and neuropathological assessment data collected from multiple studies, such as the Rush Memory and Aging Project, the Religious Orders Study, the Minority Aging Research Study, and the Clinical Core of the Rush Alzheimer's Disease Research Center."

Ana's team has already submitted the initial abstract to several conferences, and she has been awarded a stipend to present her project orally at the International Society for Magnetic Resonance in Medicine's annual conference in Toronto.

Ana increasingly appreciates her time at SDSU Georgia. "I honestly did not realize how much I was getting from SDSU Georgia until I graduated," she says. She also says her solid overall engineering background makes



"I would differentiate discrimination towards sex in terms of the profession in three ways. One is when people suggest that you are not suited to pursue a 'male career'. The second is misleading praise when people say that you have a 'male brain' because you solved a math problem. For these two cases, if you are aware of your goals and confident in yourself, other people's toxicity is very transparent. The last and only important one is self-sexism. I think this one is the most damaging because it is hard to confront your own thoughts. This is when you lose self-confidence and start overthinking, doubting yourself and other women, and wasting the energy that you could be investing in your success. The purest power comes from self-liberation and acceptance.

"In terms of career, I would advise any girl, woman, or any human of any age in any field to be free, and ambitious, challenge their comfort zone, and work towards their true passions. Just decide what you truly want and let yourself go for it. And, most importantly: have fun! There's no way that your work will stay unnoticed, because at the end of the day the results are what are valued."

it easy for her to get into any kind of engineering field. "I can confidently say that the electrical engineering program built the base of my future development. It also gave me the most important skill in one's life - how to be your own teacher. This is the skill you need to use to adjust to any new environment, especially after graduating, because that's when you lose yourself in a scary new world. Spoiler alert: in the end you do find yourself."



"A piece of advice I would give to other women in STEM is to work hard to achieve your goals no matter what difficulties you might meet on the way, and to never say 'no' to any opportunity no matter how unsure or uncomfortable you might be. Opportunity is the key to success."

She is glad she got to travel to Main Campus to do summer research and experience the American way of work, study, and living. Beyond academics, SDSU Georgia helped her grow her network and community. By making use of advising services she built and polished her resume, chose a graduate program and got her first internship through a university job fair. She was also elected president of SDSU Georgia's Art Club, an extracurricular highlight.

"One of my passions in life is traveling, so I am trying to saturate my life with it as much as I can fit into my schedule," she says. "Other than work and studies, I also attended the Women in Tech Summit in Warsaw, Poland last year and am always looking for opportunities to go to new places."

Anastasia Lejava
Biochemistry
Class of 2022

After graduating from SDSU Georgia, Anastasia received an internship offer from Bristol Myers Squibb (BMS), a major pharmaceutical company. BMS works to discover, develop and deliver innovative medicines to patients with serious diseases. She started out as an intern in the medicinal chemistry division where she worked on one of the small projects. After five months of hard work and delivering great results, she was hired as a full-time employee to work on different projects in her new role. Her day-to-day work includes being in the lab doing organic synthesis, attending meetings about various project updates or talks from scientists working in or outside BMS. This affords her the opportunity to learn new things on the job.

"SDSU Georgia has shaped my way into the industry, and I am grateful for all the knowledge and experience I got from studying there," says Anastasia. "I worked with different professors throughout my academic years both in Georgia and the USA, which later led to me landing a job in my dream country and dream company. Thanks to SDSU for helping me become a successful scientist."

Nino Chkhartishvili
Civil Engineering
Class of 2022

Graduation from SDSU Georgia was one of the most memorable days in Nino's life, as it was the culmination of an adventurous and unique journey. She decided to continue her academic track, and soon became a master's degree candidate in the Urban Studies and Planning program at the University of Helsinki. Moving to a new country with limited daylight hours was difficult, but the inspiring research institute full of brilliant minds made everything exciting. The University of Helsinki is Finland's oldest and largest educational center, and its study methods are distinct, providing a balance between practical and theoretical knowledge. She has been honored to participate in the engaging study process that unites students from multiple disciplines and considers their aspirations. Student organizations also play an enormous role in shaping university life, and Nino is happy to have been selected as a steering group student representative.

SDSU Georgia played a vital role in deciding Nino's future steps. "Thanks to its diverse courses and the opportunity to work and study simultaneously, I discovered my genuine interests," she says. "The university helped me see the importance of urban planning and the value I can bring to Georgia by deepening my understanding of this field."

Nino soon started an internship in a sustainable urban transport planning company which helped her further develop skills and understand the issues facing Georgia. When choosing a university for continuing her education, its location played a crucial role. She wanted to pick a destination where cities were already modernized. Finland is one of the pioneers in implementing modern transportation approaches. "Studying there allows me to observe the practical implementation of contemporary urban planning concepts," she says.

Besides academic activities, internships are also a competitive and valuable part of the learning process in Helsinki. Nino is proud to join the VTT Technical Research Centre of Finland team this summer as a transport systems summer trainee. VTT is the largest applied research center and technology company in Finland.



"Working and studying in fields such as engineering and science is often related to additional challenges for women because of misleading societal stereotypes. However, from my experience, women have the remarkable power and skillset vital to prosper in STEM fields. Most important is to believe in ourselves, dedicate valuable time to our interests, and let our success speak for itself!"

"Hence, my study program and traineeship will assist me in accumulating knowledge that will be valuable for initiating positive changes in my home country after graduation," she says.

Nini Giorgadze
Civil Engineering
Class of 2022

Since 2020, Nini has been working at Caucasus Clean Energy Holding (CCEH) as a junior civil engineer. During this time, she has participated in all stages of hydropower plant (HPP) development, including investigation, planning, design, construction, operation, and maintenance. Nini works on-site every day applying the knowledge she acquired at SDSU. Her first project, Akhalkalaki HPP, was completed last year and is already operating. Five months ago, Nini moved on to another CCEH project, Bakhvi HPP 1 and 2.

Constructing hydropower plants complements Nini's interests in an ideal way.

"Georgia, which has great potential to utilize renewable energy resources and transform energy security, still experiences energy insecurity as it uses a small portion of its abundant resources," she says. "My aim is to take significant steps in the energy sector in Georgia and achieve energy security."

At the same time, Nini is working as a guest hydraulic modeling specialist for the National Environmental Agency on a project titled "Scaling-up multi-hazard early warning system and the use of climate information in Georgia", financed through the Green Climate Fund in partnership with the Swiss Agency for Development and Cooperation and the United Nations Development Program.

Nini is also continuing her education, having recently been admitted to the PhD program of the Department of Civil and Environmental Engineering at Stanford University, where she was awarded a full scholarship with a stipend of \$500,000 over five years. Her research will focus on renewable energy and improving the efficiency of energy systems.

Lowering the carbon footprint by improving the efficiency of renewable energy sources is work close to Nini's heart.

"I anticipate enacting pivotal change in current energy systems in an economically and environmentally



"I advise girls not to be demotivated by traditional thinking about what professions are 'intended for women.' Being a woman in STEM has never been easy, and it is even more complicated when you are young and impressionable. Learn to wear your education and goals as your armor and leverage rejections and sneers to your advantage. Tell the world, 'Do your worst,' and you will definitely show them what you can do."

sustainable manner," she says. "My research will address how to satisfy the desire for an increased standard of living amidst rapid population growth, which requires more energy consumption and planetary resources. I am proud to be the first Georgian student who will do research at Stanford in the Engineering Department."

Nini did undergraduate coursework at SDSU Georgia which proved vital to her admission to Stanford, and which focused her research interests. In her sophomore year she began exploring the causes and effects of global warming in terms of industrialization,

vehicle usage, power plants, and the consumption of fossil fuels. In 2022, she co-authored her first paper, "Greenhouse Effect and Global Warming," which was published in the peer-reviewed international scientific journal Theoretical & Applied Science in August of that year.

Nini credits her SDSU Georgia education as having laid the foundations of her success.

"Not only did SDSU Georgia give me a solid knowledge of civil engineering, but it also prepared me well to plan to make a lasting impact on others through my work," she says.

"Unfortunately, women are still severely underrepresented in the construction industry. Despite the barriers, I wanted to develop my engineering skills practically. For over two years, I worked on constructing a hydropower plant. The project was implemented in Akhalkalaki, far from Tbilisi where I live. Therefore, I lived there part-time, two weeks per month, with a frequent long commute by a not-so-comfortable bus. Although misconceptions about gender-specific roles are gradually diminishing with a growing number of women choosing a career in construction and engineering, there is still extremely low female representation at construction sites. In my case, I was the only girl working on the site. Needless to say, establishing myself in a male-dominated area was challenging for me. However, I overcame the barriers and made an impact on the project. Working in a field that historically has not had much success for women, especially in a country like Georgia where traditional gender roles are still fairly defined within a hierarchical and patriarchal model, was challenging. Thousands of exceptionally talented female construction workers are changing how women in construction are perceived, and I am proud to be part of this endeavor.



"I would advise prospective female STEM students to be confident and proud of their decision, and to always be attentive to news and current research. STEM is always developing, and each day you will find something new and exciting. Stay up to date!"

Salome Piroshmanishvili
Electrical Engineering
Class of 2021

After graduating summa cum laude from SDSU Georgia in 2021, Salome started work at Kutaisi International University as a teaching assistant for the faculty of Mathematics and Computer Science. There, she assisted with several classes, mentored female students, and participated in the USAID grant-supported project "ICT Solutions to MSMEs".

In 2022, Salome was awarded a DAAD (German

Academic Exchange Service) full scholarship, and since then has been a student at FAU Erlangen-Nuremberg, pursuing an MS in Medical Engineering, which is a branch of medical robotics.

"I am particularly interested in neuroscience and its technological and computational applications in the field of medical engineering," she says.

"My life in Germany is pretty exciting. As medical engineering is a vast field with many different possibilities, lectures are never boring. Here, we tackle different fields, such as medicine, computer science, and electrical and mechanical engineering. As my university is quite big and located in two neighboring cities, Erlangen and Nuremberg, it affords great student life. I live in Nuremberg and commute to Erlangen, where the medical and technical faculties are located. I can proudly say that I have no dull days here."

Salome is grateful for the guidance she received at SDSU Georgia when it came to making decisions about her future, and especially for the advice and encouragement of SDSU professors when it came to applying for scholarships and admission to German universities.

As I plan to continue my work in medical engineering, and aim to popularize the field in Georgia, the faculty members of SDSU Georgia were examples for me.

Tamar Mosiashvili
Computer Engineering
Class of 2020

After graduating from SDSU Georgia, Tamar won a scholarship from the International Education Center to pursue her master's in Wireless Embedded Technologies at Polytech Nantes in France. Her program was concerned with the development, design, control and production of embedded systems. For her thesis, she did research at Institut d'Electronique et des Technologies du numÉrique on field-programmable gate array (FPGA)-based convolutional neural network hardware accelerators, with the goal of enabling FPGA-based video streaming systems to detect and classify various objects while operating in resource and energy-constrained environments.



"At first, it might be scary to not see a lot of female characters in this industry to associate yourself with, but once you determine that this is something you want to have expertise in, then your only agenda should be how to master it. If you are objectively competent, then all the doors are open, and all the opportunities reveal themselves. In my experience, the only way to succeed in this field is to become equitably competent, push yourself to your absolute maximum, and hold yourself to the highest standards. Never let anyone or anything discourage you from doing what you like. The best guarantee that you will find your place in STEM is competence and confidence, not your gender. I believe engineering is the most interesting field in today's world. It offers great opportunities that young people can take on while contributing to technological development. I can't wait to see a world where more young people join STEM and bring their exciting ideas to work."

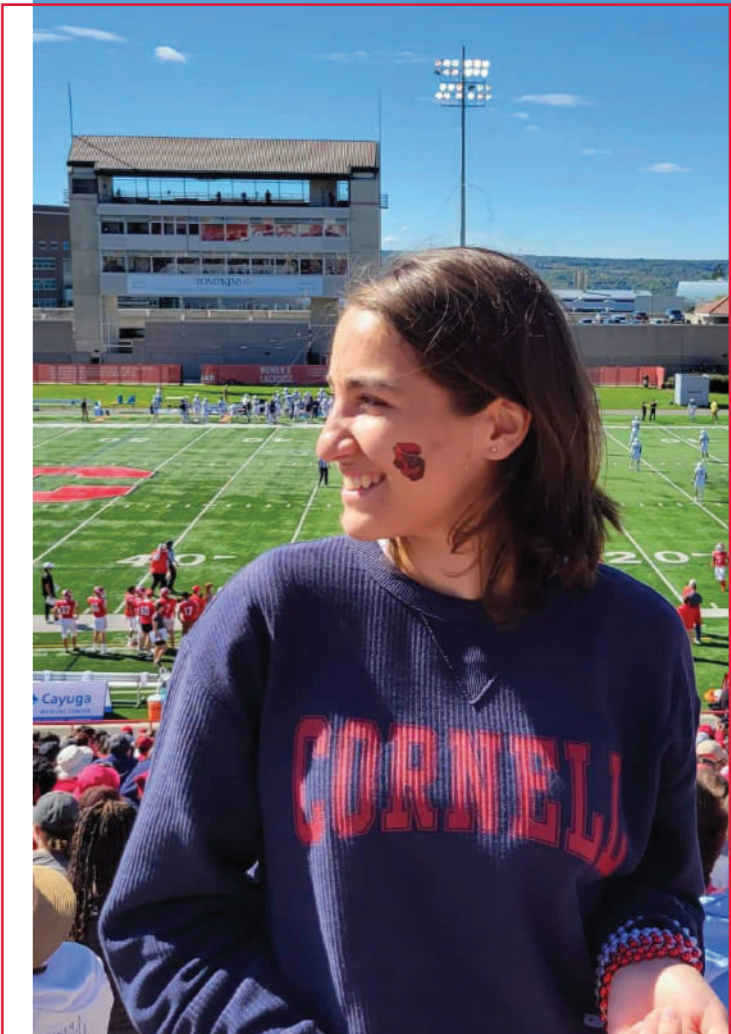
Tamar says the research had an immense influence on her interests in career development. "It united two of the most important and interesting topics of future technologies which are embedded systems and artificial intelligence," she says.

After getting her master's, Tamar got offers from academia and industry for research and engineering positions. She moved to Germany to join Hema Electronic as an FPGA developer. Hema specializes in FPGA-based embedded vision applications, and provides software and hardware solutions. They also develop modular platforms to leverage FPGA technology combined with embedded vision sensors and interfaces.

"My responsibilities as a developer include FPGA programming, design, and developing intellectual properties for low-latency video streaming devices for industrial, medical, and military applications," says Tamar. "My day-to-day work involves coding, simulating, and emulating hardware, testing and programming prototypes, as well as consulting and planning project life cycles."

Tamar says of her SDSU Georgia experience that it taught her the value of investing time and effort into things that excite one's curiosity. "Eventually, you'll become good at something that you love," she says. "Upon graduation, I happily continued my master's in the same field. The theoretical knowledge I acquired, and the challenging projects I completed during my undergraduate studies at SDSU Georgia prepared me for success in graduate school."

Tamar is the only woman in her company's engineering department, which she feels is typical of the global STEM field, but she encourages women not to be deterred.



"To women in STEM, I want to say that whenever you feel awkward that you are a woman surrounded mainly by men in a conference room or a classroom, just raise your head up high, be proud that you are in that room, and work very hard to show everyone that that conference or classroom would be lacking without you in it."

Nino Kacharava
Civil Engineering
Class of 2022

After graduation, Nino worked as an invited hydraulic modeling specialist at the National Environmental Agency, where she developed hydraulic and hydrologic models of Georgia's river basins. This project was funded by Green Climate Fund, the Swiss Agency of Development and Cooperation, and the United Nations Development Program. The ultimate

goal of the project is to establish an impact-based multi-hazard early warning system across the country. This work is pivotal for Georgia's development; it will set an example of hazard maps for the nation. "It meant a lot for me to work on a project that is set to cause huge shifts and progress in my field," says Nino.

Shortly after graduation Nino moved to the United States to continue her academic journey. She accepted a full prestigious Cornell Fellowship and started her PhD in Civil and Environmental Engineering at Cornell University in New York in fall 2022. "My schedule is very tight since I do not hold back and take as many courses as I can because there is a lot to learn," she explains. "I have all the opportunities to do so. Some of the courses are advanced numerical methods for engineers, atmospheric chemistry, physical hydrology, hydrokinetic and aerodynamic energy and water resources systems engineering."

She has also begun to code, which is new to her, and it has become a major tool in her research. The goal of her research is to better understand the mechanisms and processes of flows and transport in the lower atmosphere, how the hydrologic cycle is affected by land-atmosphere interactions, and how the human factor comes into play.

"I want to state my gratitude towards the whole project of having an opportunity to study STEM subjects at SDSU Georgia," she says. "I cannot imagine my life not having gone into civil engineering, and without this university it would not have been possible to pursue this specific field. The years spent at SDSU Georgia prepared me for independent study, writing a lot of high-quality literature reviews and project papers that are an inseparable part of doctoral studies. It also prepared me to be very productive and healthy while carrying a heavy workload."

Nino's favorite excursion since living in New York has been to Niagara Falls, just three hours away. "It even beats Times Square at night, or seeing the Rockefeller Christmas Tree for the first time," she says. "I went to the falls with very newly made friends and had the time of my life. We took a boat to see both the American and Canadian sides of the falls, and after that, I decided I wanted to stand right under Niagara Falls, so I did. I stood there for as long as I could endure the pressure of the water. I felt joyful at that moment. It felt like my whole heart was filled with freedom, nature, and chaotic calmness, though I did look insane in the photos. After I stepped out of the falls, I realized all my clothes were soaked to the shoes. So, my friend and I just changed in the parking lot from top to bottom."

She also describes getting lost on the New York subway, dressing up in a costume for Halloween with multitudes of other students, and seeing the statue of Balto in Central Park (a childhood dream). She visited the US Capitol, and flew to Germany to go on the rides at Phantasialand. "Even though STEM fields are really hard, and graduate studies require a lot of work, one can always find time to experience life," she explains. Let me tell you about one precious and fun memory I have when I returned to Georgia on my winter break. Naturally, I did not have a lot of time to see everyone, who I wanted to, and my course mate was in a similar situation, but she is one of the biggest treasures I received from SDSUG, so I was sad that I could not meet up with her. But the universe worked in our way, and we bumped into each other in Tbilisi International Airport when I was flying back to the US, and she was flying back to Norway to continue her studies. I love you Natali.

Ana Toria
Computer Engineering
Class 2022

Ana is a backend developer at Bank of Georgia. Currently she is part of a corporate internet banking team where she builds and maintains new or existing features. "Working process" is an interesting and versatile process, where one has to analyze the task first, manage dependencies with other teams, and determine what technology and solution is most efficient to produce a sustainable application. "As our main goal is bank digitalization, we have come across various intriguing problems to solve which have helped many people to ease their banking experience in the corporate sphere," Ana says.

After graduating from SDSU Georgia, Ana had to navigate the job market, decide what to do next and where to pursue her studies. "I can definitely say that university prepared me well for these difficulties, as the university provided guidance about these things in my senior year," she says. "Over the four years, I gained confidence, communication skills, tech education, and a great alumni network which helped me to start my career." She believes the most important thing she has taken away from SDSU Georgia is to never stop working hard for your goals and to not be afraid of making mistakes, as long as you treat them as lessons.

Besides working on projects, Ana also mentors junior developers and helps them to learn and develop skills necessary for the work, and to also help them to integrate among coworkers. "I am very glad that I get to mentor some current students from SDSU Georgia who have joined our team, as it is my pleasure and pride to be at their side during their first steps in the industry. It is always a fun situation when we come across each other and find out that we are part of the SDSU family.



"My advice for women in STEM is to be confident and assert yourself and your ideas. There is nothing that women cannot do; we just have to know and understand our value. Celebrate every achievement big or small with pride and always believe in your decisions. What I have learned in these years is to build networks with other women in STEM. This is crucial in empowering one another. Share your experiences, and boost one another's confidence. Our gender has nothing to do with our path to success. It is our dedication, hardwork and aspiration which leads to success."

SDSU

Georgia



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Georgia

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