

"The scientific (wo)man does not aim at an immediate result. He does not expect that his advanced ideas will be readily taken up. His work is like that of a planter for the future. His duty is to lay foundation of those who are to come and point the way."

NIKOLA TESLA



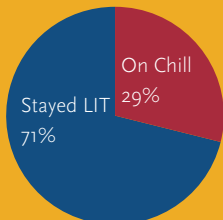
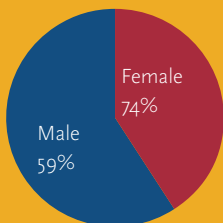
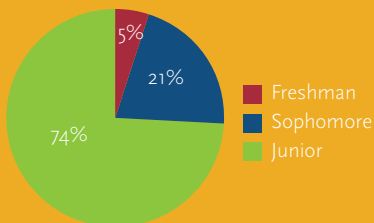
As the current school semester comes to a close, I hope you all remember these words as you move forward through your scholastic careers (and beyond). We hoped to accomplish many things during your time at ESAP: expose you to college-level engineering, introduce you to future friends/colleagues from across the globe, and provide a taste of university residential life. Most importantly, we hoped to start laying a foundation (or continuing to build on your established foundation) for your journey in the field of STEM. This included introducing you to new ideas and theories, broadening your understanding of previously learned concepts, and honing your skills in varied technologies.

There will be ups, downs, and bumps in the road- much like your three weeks here at ESAP, but just remember...**you got this!** It was a privilege for us to host such a diverse group of talented, intelligent, lively, fun, and unique students. There is no doubt in my mind that each and every one of you will achieve whatever goals you set out to accomplish. Our 2016 class will not soon be forgotten, and we hope that you will always hold your ESAP experience fondly in your memories.

Nadira Williams

NADIRA WILLIAMS, VMD
Director, ESAP

Class of 2016 Breakdown



Khattak Muhammed

2016 BIOT

I'm now in the 11th grade and recently qualified for the Tournament of Champions in Lincoln Douglas debate in 2 weeks. I'm also involved in Science Olympiad, Islamic Artists of Orlando, and Orlando Math Circle. I believe ESAP has helped refine the analytic skills necessary for me to succeed in all my academic endeavors. One day I hope to fulfill my dreams of walking on the UPenn's campus as an undergraduate student.

Patel Nandini

2016 BIOT



I'm currently a sophomore and am participating in a variety of clubs and sports including soccer, and varsity track. Additionally, I am an officer in my school's Tech Club. Moreover, I joined my school's Model United Nations/Junior State of America club. After ESAP, my friend and I hosted a nonprofit summer day program for rising 4th-6th graders called Future Engineers Unite at our local library. Our goal was to expose young children to various fields of engineering and their applications. Now we are working on becoming an official nonprofit program.

Juan Castro

2016 CGRA

I'm going to apply to the University of Pennsylvania for Early Decision. I really like UPenn and the experience at the ESAP program was amazing.

Chenghan Zhou

2016 CGRA

After my wonderful experience at ESAP, I became so fascinated with Computer Graphics that I started learning Python online and am also learning concepts in design. To learn more about interactive design, I secured an internship in the marketing department of State Grid Electricity to design their website. ESAP has inspired me to pursue DMD as my ED choice. I'm now preparing for tests and learning more about American culture. Following my ESAP experience, I am eager to figure out how to balance the American culture that I am moving towards and the Chinese culture in my blood.

Jian Hunag

2016 COMP



I just started my senior year in Wu Han, China. I will apply to Upenn and hope I get admitted, since I really love this place. Besides that, I've taken over the robotics club in my school. I shared my ESAP experience with others by writing a short article about the fantastic things I had achieved at UPenn. It is posted on my school's website and read by almost two hundred people. I also participated in a math competition in China and my team placed 5th nationally.

Lia Kitahata

2016 COMP

I'm in my senior year of high school and will be applying to Penn for Early Decision. Loving senior year so far and was elected President of my school's branch of the California Scholarship Federation. This year we added an informal club for our version of #Girls-WhoCode! We decided to call it the "CCC" ("Cats, Cookies, and Coding") because occasionally, we'll gather together and eat cookies, watch cat videos, and learn more about coding. I'm also an Ambassador for a new shoe company called BANGS. Currently, my job is to make a short video of me

"doing something I wish I did more of every day for 10 days" and share it with the world to promote adventure. In my case, that's skateboarding.

Hongrun (Cheryl) Zhou

2016 COMP

Being in IB, I recently wrote my Math Internal Assessment using the programming skills I've learned in ESAP. And I also co-organized a TEDx event at my high school :)

Ziqing (Candy) Zhou

2016 COMP

I'm now a junior at Jiangsu Tianyi High School, in Wuxi, Jiangsu, China. After this summer, I started a program about machine learning, programming with Python, the language I learned at ESAP. I am now doing a VR calculator, drawing the result of hand-written mathematical expressions on the screen as soon as the camera catches those expressions. The knowledge, as well as the method of research I learned in ESAP greatly helped me in this process!

Felipe Calero

2016 NANO



I am in 11th grade in the IB program at Academia Cotopaxi, but planning to study in the US when I graduate. After ESAP, I interned in my dad's company for a month and learned about SQL and some marketing. Now I'm taking part in several clubs: varsity volleyball, the National Honor Society (2nd year), Model UN, student government (Vice President), and the Empowerment Education for Equality (EEE) club. In my free time, I'm also learning to code Haskell and learning physics through online lectures. Most importantly, I am one of the leaders of the local Global Issues Network (G.I.N.) at my school. We are hosting this year's South American conference.

Stephanie Sheehan

2016 NETS

I founded the club "Women in Science" at my school to promote STEM careers to young women who are not aware of the possibilities that STEM holds for them.

Deniz Enfiyeci

2016 ROBO



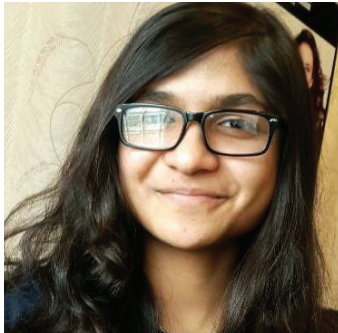
This August I've completed an amazing internship at a startup, Velocity. These days, whenever I'm not working on college applications or schoolwork, I'm cooking, eating or blogging about food, learning Japanese and tinkering with Arduino's (thanks ROBO!). Currently, I'm in the process of organizing a Django Girls workshop for high school students.

Xinyu (Lily) Wang

2016 ROBO

I'm an international student in LA (my 2nd year here). I really appreciate the opportunity I had this summer in the Robotics program!!! It helped me start my robotics club in my school and this club means a lot to me. I did FRC back in China, but my current high school didn't initially have a robotics program. After ESAP, I returned with the confidence and inspiration to start my own club (which was well-received). Besides that, it allows me to build crazy stuff on my own- my first plan is to make a drone! Thanks all my professors and TAs I had during the summer and thanks to the ESAP team!!!!

Samia Mugeem
2015 BIOT



I am currently enrolled in the University of Toronto in Canada to study Computer Science. I joined the Undergraduate Women in Computer Science and they have amazing events planned, such as field trips to technology companies, attending hackathons, and inviting guest speakers. ESAP helped me prepare for life in college by giving me a taste of the workload and day to day life of what being in university is like. It will always be a fond memory and a great learning experience.

Hangwen (Hannah) Zhang
2015 BIOT

I just started my freshman year at Case Western Reserve University, majoring in biomedical engineering. I'm also volunteering at the Seidman Cancer and an emergency services clinic. I joined the school's frisbee, kendo and campus canine clubs, as well as the hackerthon (hacker society). Although ESAP finished more than one year ago, it helped me better adapt to college life, which can be very challenging.

Stella Tetero
2015 NANO



I am starting my freshman year at Columbia University and so far, it has surpassed my expectations in every possible way. The three weeks of ESAP enhanced my love for nanotechnology and I am now thinking of majoring in chemical engineering, then do nanotechnology in graduate school, as well as cancer research.

Andrew Skow
2015 NETS

Since ESAP, I have been very active in my school's robotics program and captained our team, 1884. Last summer I secured an internship at the Royal Air Force Valley Base, with a company called QinetiQ, who specialize in military contract work. I was part of a small team of three interns who supported two senior members soliciting a Hazard Identification Conference that sought to find possible safety concerns in the Hawk T1 aircraft stationed at the base. It was a once in a life time experience being able to get down and dirty with Rolls Royce jet engines, and sit in the cockpit of active RAF training aircraft, while partaking in discussions with representatives from the RAF, Babcock, and Rolls Royce.

Jonah Miller
2015 ROBO

Since ESAP, I went on to found the robotics club at my school and teach basic robotics skills. In my free time, I continue to do gymnastics and read whenever possible. I recently submitted my early application to Penn! I have submitted a few other applications, but haven't heard anything back yet.

Mihir Pethe
2014 BIOT

The main thing I've done this year was becoming a student at UT Austin.

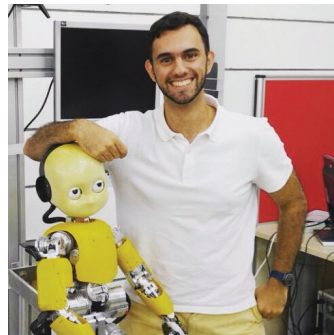
Namgoong Yoon
2014 CGRA

Last summer, I was a part of a research program called Secondary Student Training Program (SSTP). I worked in the lab of computational biochemistry and my research work was done entirely through computer simulations, coding, and working with 3D graphics program. As Computer Graphics alum, I was able to work with 3D simulations and graphics programs with exceptional fluency. I realized my passion as an engineer is to combine different areas of science (i.e. computer graphics, biology, etc) into one topic and study them. I enjoyed the experience, learning a new coding language, new biology facts, and new 3D visualization software. Also, enjoying life with friends!

Nathan Yang
2014 COMP

I'm currently a computer science major at the University of California, Los Angeles. Outside of class, I'm a mentor and outreach chair for Hacker Fund's LA chapter, an organization that provides resources for computer science education. As a mentor, I teach students how to code and get them excited about computer science and technology.

Onar Tuna
2014 ROBO



I am a second year Honours Computer Science student at University of British Columbia. I had a recent robotics experience in a research lab called KOVAN in Ankara, Turkey. I was an intern there last summer and worked in the lab on a humanoid robot called iCub (I call it Chucky 2). I programmed it to imitate a person's arm and also to grasp objects at certain positions. I had a lot of fun working as an intern and most importantly, I learned a lot. Hope to see you all soon!

David Kong
2013 COMP

I'm now a junior in computer science at the University of Michigan. I recently wrapped up my fourth internship, this time at Square in San Francisco.

Grant Oxer
2012 COMP

I am finishing up a Bachelor's Degree in Computer Science and a minor in Foreign Affairs at the University of Virginia. After graduating in May, I will be working full-time as a Program Manager for Microsoft, and I am really excited to start my career in the software industry.

Annie Shin
2008 COMP

I joined Docker as a Software Engineer!

Chirag Gupta
2007 NANO

I've had the opportunity to do lots of amazing things since my time at SAST in '07. I attended Northwestern University's McCormick School of Engineering where I finished my undergraduate degree in Industrial Engineering and Management Science in 2012. I then got into web development and app development as a freelancer for about a year before starting my own business. My company, NoD Coworking, was launched in Dallas, TX in 2014, and my team and I have incubated 100+ early stage tech startups who have collectively raised \$10M+ to launch new ventures in technology.

Erica Chen
2006 CGRA

I've been developing a new material for solar light absorbing layer in thin-film solar technology. I'm in the process of making a prototype photovoltaic device. This will be the capstone of my PhD thesis... so that means 10 years later, an alumni of this program got a BS, MS, and PhD in Materials Science & Engineering. The BS was done at UCLA. MS & PhD at the University of Michigan. I did the 3D modeling program. I haven't done any of that since I had to do CAD drawings for replacement parts to the machines in our lab. I caught onto programs like CATIA, NX and SolidWorks a lot faster.



*"Everyone you will
ever meet knows
something you don't"*

•BILL NYE



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SUMMER ACADEMY at PENN

