

Tyler Joseph Stern

Cumming, GA | (678) 799-4923 | tyler.jst@gmail.com | tylerjst.github.io

Education and Honors

Emory University, Atlanta, GA

Bachelors of Science in Applied Physics, May 2016

Cumulative GPA: 3.92/4.00

Major GPA: 3.92/4.00

Areas of Interest

Sustainable technology and its capability to solve current environmental issues

Renewable energy technologies, specifically photovoltaics and nuclear fusion

Sustainable infrastructure and public transportation

Science communication and education

Graphic design

Relevant Coursework

Advanced Undergraduate Lab

Green Business (ENVS Special Topics)

Paris is an Explanation (ENVS Special Topics)

Quantum Mechanics

Analytical Mechanics

Digital Electronics

Differential Equations

Multivariable Calculus

Honors and Awards

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| 2016 | Campus Movie Fest - Top 16
Wrote, co-directed, and starred in <i>If Else</i> , a 5-minute student film selected as one of the top 16 films in Emory's <i>Campus Movie Fest</i> competition |
| 2015 | Phi Beta Kappa Honors Society
America's oldest honors society whose induction criteria is based on scholarship, breadth of culture, and general promise. |
| 2015 | Phi Sigma Pi Honors Society
Honors outstanding scholarship in physics; eligibility achieved with a physics GPA of 3.5 or higher and college GPA within the top third of the class. |
| 2015 | Emory University Sustainability Case Competition - 3rd Place
Awarded 3 rd place in Emory's first sustainability case competition for my team's carbon tax plan to promote renewable energy growth in Georgia. |
| 2014 - 2015 | Prentice Miller Scholarship (\$20,000)
Awarded to "deserving students" based on demonstrated financial need and academic performance. |
| 2013 - 2015 | Dean's List
Earned a GPA of 3.75 or higher in all but two semesters. |

Work Experience

- 2015 **Emory University Office of Sustainability Initiatives, Atlanta, GA**
General Intern
Designed and constructed an HTML 10-Year sustainability report highlighting the office's achievements. Built a new sustainability map using the Leaflet Javascript framework and university GeoJSON data. Created prototypes for a new, online sustainability pledge and updated sustainability dashboard
- 2015 **Emory University Office of Housing Operations, Atlanta, GA**
Graphic Design Intern
Designed and created a "Sustainable Move-In List" and other infographics for Emory Move-In 2015. Directed social media campaign to disseminate infographics about sustainable products and topics. Boosted sustainability awareness by strategically placing designed stickers around campus
- 2014 **Emory University Residence Life and Housing, Atlanta, GA**
Pre-College Resident Advisor
Mentored 350 high school juniors and seniors on collegiate issues like diversity and time management. Coordinated and supervised trips to Decatur, Georgia Aquarium, and The Carter Center, among others. Liaised Dr. Michael Mina's *Infectious Diseases* course and the *Infectious Diseases Institute*
- 2013 - Present **Emory University Residence Life and Housing, Atlanta, GA**
Resident Advisor, Sophomore Advisor
Create a home for 260 first-year students and collaborate with staff to build community within ResHall. Undergo weekly leadership training to resolve conflict and facilitate personal development. Independently developed an FYE-wide trip to Fernbank Planetarium attended by over 100 students
- 2013 - 2014 **Fernbank Science Center, Atlanta, GA**
Astronomy Assistant
Orchestrated children's and public planetarium shows, which included a narrated tour of the night sky. Educated attendees on noteworthy constellations, stars and relevant astronomical phenomena. Operated the Zeiss V projector, audio mixer, channel switcher, and other equipment

Teaching and Research Experience

- 2013 - 2014 **Emory University, Atlanta, GA**
Teaching Assistant – Introduction to Astronomy, Dr. Erin Bonning
Graded homework, conducted review sessions before each of 4 exams in addition to 1-on-1 help sessions with students, and assembled a course roster using Microsoft Excel to organize and calculate students' grades.
- 2012 - 2013 **Scholarly Inquiry and Research at Emory (SIRE), Atlanta, GA**
Research Assistant – Dr. Richard Williamon
Researched Cepheid, Algol and variable star systems in Dr. Richard Williamon's laboratory. Presented a poster promoting fundamental knowledge of variable stars at SIRE's symposium in April. Studied and critiqued 10 journal publications from the *Royal Astronomical Society*

Independent Projects

- 2014 **Naval Academy Science and Engineering Conference**
Scribe

Served as one of four physics majors selected to represent Emory University at NASEC 2014 where we drafted a publication on automated planetary rovers

- 2014 **Emory University Office of Sustainability Initiatives**
Grant Winner
Applied for and awarded a \$700 grant to install LED lights inside and outside of Evans residence hall. Coordinate Emory's electrical engineer and Director of Housing Operations to organize installation
- 2012 - Present **StoriesHouse.com**
Co-Founder and Contributor
Engineer future projects and manage current endeavors for StoriesHouse, a multimedia aggregator, while also writing short pieces of narrative fiction, non-fiction, and satire.

Film Experience

- 2016 **If Else**
Writer, Co-Director, Actor
Conceived the 5-minute film, one of the top 16 featured at Emory's *Campus Movie Fest* finale
- 2015 **Residency**
Writer, Director, Editor
Wrote, shot, and edited with a Canon T5i and Adobe Premier for my *Intro to Digital Video* course

Leadership Experience

- 2015 - Present **Emory Climate Organization**
Co-Founder, Web Technology & Marketing Director
Catalyzed the creation of the organization through involvement in the "Paris is an Explanation" course studying the COP21 conference. Spearheading the marketing campaign for *Climate Week @ Emory*, designed to increase climate literacy on campus.
- 2015 - Present **Emory Engineering Society**
Co-Founder, VP of Communication
Implement programs to create community among students interested in engineering. Designed the organization's logo and ensured the creation of t-shirts for the club's members
- 2014 - Present **The Emory Spoke**
Contributing Writer, Graphic Designer
Brainstorm during weekly meetings and write articles which are posted on emoryspoke.org. Photoshop pictures for online articles and co-designed *The Spoke Seasonal* Fall 2014 magazine
- 2014 - 2015 **Emory Robotics Club**
Co-Project Lead
Designing and engineering an arduino controlled LED frequency spectrum visualizer. Launched a social media campaign to advertise the Share a Hack with Coca-Cola hackathon
- 2012 - 2014 **Emory University Astronomy Club**
Treasurer, Co-Vice President
Reestablished the club's standing with Emory College Council and submitted the budget for 2014-2015. Organize events such as planetarium shows, concerts, and presentations by esteemed astronomers
- 2012 - 2013 **Emory University Residence Hall Association**
Creativity Chair

Encouraged sustainable lifestyles and community involvement within Turman Hall via programming. Created decorations for Turman Hall's homecoming float and Fall Fiesta celebration

Skills and Certifications

Language: Spanish (*Advanced*)

Programming Languages: Java, HTML, Javascript, MATLAB, Python, Verilog

Graphic Design: Adobe Premier, Adobe Photoshop, Adobe Illustrator

Certifications: SAPA (*Sexual Assault Peer Advocates*) Trained, National Safety Council Defensive Driver

Interests

Soccer, Film, Comedy, Writing, Beatboxing, Electronic Music, Ukulele