

EMMA BARTOS BANKER

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EDUCATION

Lehigh University

B.S. in Electrical Engineering and Cognitive Science, minor in Aerospace Engineering

GPA: 3.7/4.0

- Enrolled in Integrated Degree in Engineering, Arts and Sciences (IDEAS) program, a highly selective honors program
- *Honors and Awards:* Eta Kappa Nu; Martindale Student Associates Honors Program; One of two sophomores selected for 611 Challenge Award (in recognition of strong leadership, service to others and commitment to academic excellence); Dean's List

Bethlehem, PA

Expected May 2021

WORK EXPERIENCE

Lehigh University, Office of Residence Life

Resident Assistant

- Responsible for the academic and social well-being of first-year and sophomore STEM students
- Mentor students and provide counselling on personal and academic issues
- Attend leadership training and staff development meetings to share ideas, problem solve and continuously improve performance

Bethlehem, PA

August 2018 – Present

Sikorsky Aircraft, A Lockheed Martin Company

Electrical Engineering Intern

- Interpret 3D CAD models to create manufacturing instructions for installation of electronics parts in aircraft
- Analyze data from multiple departments to drive increased coordination between teams and track root causes of issues to ensure that effective solutions are developed and implemented; heavily utilize Tableau for data analysis and presentation to effectively convey insights

Stratford, CT

Summer 2020

Avionics Quality Engineering Intern

- Developed a methodology and process flow to track aircraft wires throughout the wire harness manufacturing processes utilizing a Microsoft Access database
- Improved Avionics Quality department data collection and analysis processes by leveraging Tableau to integrate multiple data sources and building dashboards to display key operating metrics, highlighting opportunities for improvement
- Top finisher in intern competition out of ten teams to design and create a model helicopter that simulated autorotation to increase descent time; utilized Arduino and sensors to manage blade pitch

Summer 2019

United States Department of Defense

Data Center Management Intern

- Agency Special Background Investigation, TS/SCI cleared through full scope polygraph

Fort George G. Meade, MD

Summer 2018

LEADERSHIP AND CAMPUS INVOLVEMENT

Lehigh Racing Formula SAE

Electric Vehicle Team Lead (Spring 2020 - Present)

- Head designer of Lehigh University's first electric vehicle
- Develop block diagrams, wire harness layout and printed circuit board schematics; manufacture electrical components

Fall 2017 – Present

Management Team (Spring 2020 - Present)

- Aid in development of static events such as cost report and design report
- Manage team to ensure timely and efficient delivery of tasks

Electronics Team Lead (Summer 2019 - Present)

- Lead design of wire harness and institute effective methods of collecting and analyzing data in order to maximize vehicle performance while optimizing weight and cost
- Oversee all production and installation of electronic systems, and coach other members to support their skill development

Electronics Team, Marketing Leader (Fall 2017 - Spring 2019)

- Designed printed circuit boards and researched new and advanced technologies to be included within the vehicle

Leadership Positions

Eta Kappa Nu (IEEE Honor Society) – *President*; Women's Club Basketball – *Vice President*; Center for Academic Success -

Electrical Engineering Peer Tutor; Engineers Without Borders - *Social Class Group Leader*

Other Clubs & Organizations

IEEE, Society for Women Engineers, The National Society of Leadership and Success, Kappa Alpha Theta (Sustainability Committee)

SKILLS AND INTERESTS

Programming Languages – Java, MATLAB, Arduino (C/C++), VBA, HTML, CSS

Skills – Proficient in Autodesk EAGLE, Cadence Allegro/OrCAD, PSpice, SolidWorks, Tableau and Microsoft Access, Excel, Word, and PowerPoint.

Interests – Basketball, running, community service, reading, and hiking