Blake McHale

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EDUCATION

Northeastern University, Boston, MA

Candidate for Bachelor of Science in Electrical and Computer Engineering   Expected May 2022

Pursuing Minor in Biomedical Engineering   Current GPA: 3.89

Relevant Courses:	Physics II, Calculus III, Differential Equations, Embedded Robotics, Biology, Biomedical Circuits and Signals, Fundamentals of Networks
Activities:	AIAA Northeastern Unmanned Aerial Vehicles (Outreach Coordinator/Project Lead/Founding member), AIAA NASA, Colleges Against Cancer, NASA International Space Apps Challenge Boston (1st place)
Awards:	Dean's Scholarship, Dean's List

Ledyard High School, Ledyard, CT   June 2017

Honors:	Bausch and Lomb Science Award, National Honor Society, CIAC Scholar Athlete, AP Scholar with Distinction
Activities:	Eagle Scout (June 2015), National Honor Society (Vice President), Palestra (President), Varsity Soccer/Tennis/Indoor Track, Yale Physics Olympics Team, FIRST Robotics, Final Cut (Acapella)

SKILLS

Computer Applications: SolidWorks, AutoCAD, Inventor, Excel, Access, Unity

Programming: C++, Python, Java, VBA | Familiar with MATLAB, HTML, CSS, SQL, C#

WORK EXPERIENCE

Northeastern ECE Research, Boston, MA   Fall 2018 - Present

Research Assistant

- Developing a mobile application using React Native that will provide a user interface for an Alzheimer's detection sensor

Northeastern ECE Research SICA Lab, Boston, MA   Fall 2018 - Present

Research Assistant

- Coding communication system between drones using Robot Operating System (ROS) for decentralized network swarms of SUAS

Supervisor of Shipbuilding Groton, Groton, CT   Summer 2018

Student Trainee (Office Automation)

- Developed, designed, optimized, and secured database containing PII with SQL and VBA
- Wrote programs that helped optimize flow of NOFORN, confidential, and unofficial documents
- Attended arrangement meetings and engaged with engineers discussing submarine systems

PROJECTS

AIAA – NUAV Delta5 Race Timer   Fall 2018 - Present

Project Lead

- Designing, soldering, and coding race timer for competitive drone racing
- Leading students through wiring and coding of system

Cornerstone of Engineering II – Maze Game   Spring 2018

- Developed, designed, and tested escape room maze; constructed, coded, and wired controller for maze
- Used Processing, Arduino, and SolidWorks to construct game

VOLUNTEER EXPERIENCE

Palestra, Ledyard High School, Ledyard, CT   Fall 2015 – Spring 2017

President

- Race Director for the *Colonel Classic 5k for Conor* (organized and managed donations from businesses for the event, raised $7000, also created a scholarship fund)

Backus Hospital, Norwich, CT   Summers 2015 - 2017

Junior Volunteer

- Transported patients to and from procedures; delivered lab samples and postal mail
- Shadowed dosimetry, endoscopy, and emergency room doctor

INTERESTS

Soccer, basketball, tennis, running, hiking, climbing, singing, and playing guitar