Lucas Ross

Present Address: 523 South 4th Ave, Ann Arbor, MI 48104
Cell Phone: 248-303-9839 **Email:** lukeross@umich.edu

Education

University of Michigan, Ann Arbor, MI *May 2018*
Bachelors of Science in Computer Science Engineering
Minor in Mathematics, Minor in Physics
GPA: 3.95 / 4.00

Computer Skills

Languages: C/C++, Matlab, Python
Operating Systems: Windows, Linux, UNIX
Tools: Git/GitHub, GDB, Valgrind
Notable Projects:

- C++ travelling salesman algorithm using branch and bound
- C++ text file compression algorithm using Hilbert Curve
- Python modeling of physical systems (e.g. gravitational forces and motion of a 3 star system)
- Matlab snare drum music transcriber and programmable metronome

Major Coursework: Machine Learning, Cryptography, Data Structures and Algorithms, Computer Architecture
Minor Coursework: Abstract Algebra, Linear Algebra, Discrete Math, Calculus I–IV, Physics I–III

Honors and Awards

Scott Ludwig Alumni Drumline Scholarship Recipient *Sep 2016*

- Awarded for contributions as a leader in the Marching Band

James B. Angell Scholar *Mar 2016*

- Awarded to students who received all A's 5 consecutive semesters

William J. Branstrom Freshman Prize *Mar 2015*

- Awarded to freshmen students in the top 5% of their school/college class

Work Experience

Computer Science Intern *May 2016 – Present*
AutonomousSafety LLC, Ann Arbor, MI

- Startup company specializing in autonomous UAV systems for first responders
- Programmed interface between chemical sensor and Raspberry Pi computer (C++) and real-time processing of sensor data (C++) to deliver sensor functionality
- Programmed real-time display of data on GUI (Matlab) for sensor integration development and testing
- Assisted team in design of radioactive source reconstruction algorithm for autonomous flight applications
- Interviewed first responders and hazmat workers to determine product-market fit

Additional Experience

Section Leader of the Michigan Marching Band Drumline *Dec 2016 – Present*

- Lead drumline in a minimum of 3 hours daily rehearsal during the week
- Collaborated with staff members, full ensemble, drumline, and snare-line
- Learned and performed pregame, halftime, and postgame shows for all home and select away football games
- Earned Scott Ludwig Alumni Drumline Scholarship for leadership contributions

Michigan Aeronautical Science Association (MASA) *Sep 2014 – May 2016*

- Engineering design team focusing in hybrid propulsion technologies and composite structures, culminating in rocket launches at yearly Intercollegiate Rocket Engineering Competition (IREC)
- Designed airframe structures using Solidworks CAD program
- Helped manufacture and assemble airframe parts in metal machining shop
- Worked in large (20-30) and small (3-6) groups, dividing tasks to achieve goals