ZACHARY OLKIN

US Citizen ⋄ (720)·431·3620 ⋄ zolkin@gatech.com

EDUCATION

Georgia Institute of Technology   *August 2018 - May 2022*
Candidate for Bachelor of Science in Computer Engineering
GPA: 4.00
Member, Eta Kappa Nu

EXPERIENCE

iREAL Lab   January 2020 - Present
Underdraguate Researcher   *Atlanta, GA*

· Lead the development of an autonomous quadrotor simulation leading to the submission of one paper. Developed and analyzed non-linear controllers and filters. Innovated novel methods for time-optimal, onboard trajectory generation.
· Created and tested a tool to receive data from external cameras on a flying quadrotor in real time.

Grand Challenges   May 2020 - Present
Team Facilitator   *Atlanta, GA*

· Guide the work of a team of undergraduate freshmen in the Grand Challenges program at Georgia Tech. Help the team develop ideas, work on leadership skills, and think critically about real world problems.

Left Hand Robotics   May 2019 - August 2019
Robotics Engineering Intern   *Longmont, CO*

· Designed filters for accelerometer data that reduced noise by 6 orders of magnitude. Wrote critical IMU device driver for an new IMU.

ACTIVITIES

The Hive Makerspace   August 2019 - Present
Master Peer Instructor   *Atlanta, GA*

· Teach students soldering, breadboard use, 3D printing best practices, and PCB Fabrication. Also help students find the correct parts for their projects.
· Teach other peer instructors how to use the benchtop electronics tools. Assist with the new peer instructor interview process.

SKILLS

Programming	C++, C, Matlab, x86 Assembly, MIPS Assembly
Hardware	Oscilloscopes, Logic Analyzers, Waveform Generators, Power Supplies
Software	Eagle CAD, Solidworks, GitHub, LaTeX, Vim
Tools & Operating Systems	Linux, Windows, Slack, Microsoft Office, Google Drive

PATENTS AND AWARDS

US Patent: # 9,303,448: *FLOOD SHIELD SYSTEMS AND METHODS*
US Patent Pending: *AUTONOMOUS PATH TREATMENT SYSTEMS AND METHODS*
1st Place at HackGT: First place of about 200 submissions. *Georgia Institute of Technology (2019)*
Genius Award: Award for assisting others and achieving high academic standards. *Georgia Institute of Technology (2019)*