Jack Wolfard

Connect on LinkedIn for Phone # and E-mail | linkedin.com/in/jackwolfard | U.S. Citizen

EDUCATION

Georgia Institute of Technology   Atlanta, GA
Master of Science in Computer Science   GPA: 4.0/4.0   *Jan. 2021 – May 2022*

Georgia Institute of Technology   Atlanta, GA
Bachelor of Science in Computer Science   GPA: 3.97/4.0   *Aug. 2017 – Dec. 2020*

EXPERIENCE

Southwest Research Institute   San Antonio, TX
Student Analyst   *May 2020 – Jul. 2020*
- Implemented remote mission planning for a ground vehicle using gRPC and QGroundControl
- Designed a decoupled Python library for integrating hardware components with program logic
- Iterated on design using SITL simulation and ground testing
- Created a mountable 2-axis gimbal controllable via UART
- Presented PDR proposal and final report to division leadership

NCR   Atlanta, GA
Software Engineering Intern   *May 2019 – Aug. 2019*
- Decreased turnaround time from a few business days to seconds for vital customer information
- Developed a full stack Angular web application and integrated with 10 year old .NET solution
- Presented final product to executive leadership receiving an honorable mention at intern expo

Georgia Institute of Technology   Atlanta, GA
Teaching Assistant   *Jan. 2018 – May 2019; Aug. 2020 – Present*
- Head TA for Design of Operating Systems, previously taught Introduction to Computer Science
- Assisted students in office hours, developed course material, and delegated tasks among TAs

RESEARCH

Zero Knowledge Processor   *Oct. 2020 – Present*
- A toolchain and virtual machine which can run ANSI C95 programs in Zero Knowledge
- Built custom LLVM object writer in order to enable linker in toolchain
- Designing architecture to distribute ZK workload across parallel ZK machines using gRPC and CloudLab

Optimizing Eidetic Systems   *Oct. 2019 – May 2020*
- Worked on a modified Linux kernel which implemented deterministic record and replay
- Built system call shims to track generated replay output in order to detect divergence from recording in C
- Created Python development tools which parsed recording logs for analysis

LEADERSHIP & SERVICE

Assistant Chief Engineer at WREK Radio   *Apr. 2019 – Present*
- Introduced Kanban project management to more effectively utilize student engineers
- Coordinated with professional staff, contractors, and students for a full station move
- Developing pathway program for training new engineers to maintain station

President of Navigators at Georgia Tech   *May 2019 – Apr. 2020*
- Planned campus wide events attended by hundreds in collaboration with other campus organizations
- Adapted voting system to remote option for electing new leaders during pandemic

Resident Assistant   *Aug. 2019 – Mar. 2020*
- Facilitated the development of community between 350 residents
- Promoted diversity, inclusion, health, and well-being through programming and passive initiatives

TECHNICAL SKILLS

Languages: C, Python, C#, C++, Java, JavaScript, x86, Verilog
Topics: Linux, Operating Systems, Computer Architecture, Computer Vision, Cryptography, Networking
Libraries & Frameworks: NumPy, Matplotlib, gRPC, LLVM, Angular, Node.js, .NET
Tools: Git, Vagrant, Docker, Google Cloud Platform, Jupyter, Anaconda