

JOSHUA VISZLAI

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EDUCATION

Georgia Institute of Technology

Bachelor of Science Computer Science, Minor in Physics

May 2020

GPA: 4.0/4.0

SKILLS

Programming Languages: Java, Python, C, C#, C++, Verilog with some experience in F#, Q#, Swift, HTML, CSS

Environments: OS X, Linux, Windows, Visual Studio, IntelliJ, Android Studio, Xcode, Quartus

Languages: English (native), French (intermediate)

EXPERIENCE

Habanero Extreme Scale Software Research Lab

Atlanta, Georgia

Undergraduate Researcher

Aug 2019 - Present

- Work under Professor Vivek Sarkar in research on compiler optimizations for RISC-V processors
- Use LLVM with RISC-V support and a RISC-V simulator to implement and test optimizations
- Explore optimizations within register allocation and instruction scheduling steps of a compiler

Microsoft

Redmond, Washington

Software Engineering Intern

May 2019 – Aug 2019

- Designed and implemented a machine learning service to categorize user feedback against product teams
- Utilized a SQL database for storing and categorizing 17,000+ user comments
- Worked with Microsoft Research engineers to make a small contribution to the Q# Compiler

RoboJackets

Atlanta, Georgia

Intelligent Ground Vehicle Competition Software Member

Oct 2018 – Present

- Work with team members to write code for a 200+ lb robot autonomously navigating rough terrain
- Authored nodes for mapping pixels into a 3D space and segmenting ground/nonground points using a 3D Lidar
- Wrote the open-source codebase using ROS and C++

TEACHING

CS2110 – Computer Organization and Programming

Atlanta, Georgia

Head Teaching Assistant

Aug 2019 – Present

Teaching Assistant

Jan 2018 – May 2019

- Lead a staff of about 11 teaching assistants for a course of about 200 students
- Teach weekly recitations for around 50 students
- Create and grade weekly homework and labs
- Hold weekly office hours

Georgia Governor's Honors Program

Rome, Georgia

Instructor and Computer Technician

Jun 2018 – July 2018

- Help teach introductory programming and data structures courses
- Work with small team to handle various IT needs for the program
- Work with another instructor to teach an elective course on machine learning

RoboJackets

Atlanta, Georgia

Outreach Member

Aug 2016 - Present

Outreach Assistant Project Manager

Aug 2017 – May 2018

- Organize FIRST Robotics Kickoff Event for Georgia, with attendance of over 1400
- Plan educational sessions to promote robotics in high schools across the country
- Mentor a high school robotics team throughout the year