Markian V. Hromiak

markian.hromiak@yahoo.com (239) 258-2517 www.github.com/MHromiak

EDUCATION

Georgia Institute of Technology, Atlanta, GA

August 2016 – Present Expected graduation December 2020

• Candidate for Bachelor of Science in Computer Science

• Georgia Tech Provost Scholar

Cumulative GPA 3.40

PROJECTS

Wasteland Sorting Algorithm

August 2019 – Present

- Drafted and tested an original sorting algorithm against standard sorts, showing superior runtime for large data
- Documented complexity analysis and design procedure in an open source Git repository free for public use
- Submitting for undergraduate publication

Tam's Variable Focus Glasses

August 2019 – Present

- Optimized and designed a blueprint for corrective eyewear using water for focus
- Filing a patent claim after constructing a patent claim and performing an IP search

DrivingForce App

January 2018

- Designed a hackathon web app to host volunteer organization work opportunities
- Created HTML/CSS interface with Angular5 linked to a Google Firebase database

WORK EXPERIENCE

Sandia National Laboratories – TITANS Software Engineering Intern

May 2020 – August 2020

- Designed an application-layer noisy channel module to empirically compare forward error correction implementations
- Constructed a pipeline algorithm for reliable file transfer over an unreliable simplex channel
- Optimized algorithm performance through test-driven development and memory profiling

Georgia Tech Teaching Assistant

August 2019 – December 2019

- Educated students on object-centered software design principles and version control
- Guided students through application construction following GRASP and SOLID principles
- Taught a seminar on RESTful APIs and HTTP/web service applications

Edward Jones Investments Software Engineering Intern

May 2019 – August 2019

- Constructed RESTful, microservice-centric, front-end APIs for an AGILE, multi-platform UI enterprise application
- Collaborated in daily scrum meetings and AGILE training/research to aid in a firm-wide Waterfall-to-AGILE transition

SKILLS

Computer Languages and Libraries:

- Proficient in Python, Java, C/C++; experience with shell scripting, SQL, Angular9, Python Flask, Springboot **Software and IDEs Used:**
- Autodesk Inventor certified; Eclipse, Android Studio, IntelliJ, Spyder, Maya, LaTeX, Kubernetes, VSCode **Spoken Languages:**

• Intermediate French: basic Mandarin and Ukrainian

Relevant Courses:

• Intro to AI, Design & Analysis of Algorithms, Software Engineering, Operating Systems, Robotics & Path Planning, Processor Design, Automata and Complexity

AWARDS AND HONORS

- Eta Kappa Nu IEEE honor society member
- GT 'Make a Difference' Hackathon 2018 runner-up University Physics Competition silver, bronze medals **CAMPUS INVOLVEMENT**
- Georgia Tech Climbing Club Safety Officer
- Girls Who Code @ GT Curriculum Developer
- Georgia Tech Inventure Competition Prize Semi-Finalist
- - WREK radio program host
- Society of Physics Students