## Taha Afzal

#### **WORK EXPERIENCE**

#### Software Engineer, Raven Industries, Inc.

May 2022 - Present | Sioux Falls, SD

- Spearheading the development of the Raven's Viper 4+ embedded system software in an Agile team, utilizing Qt and C++.
- Specifying, architecting, prototyping, developing, and testing applications while consistently following best practices.
- Leading the enhancement of a file conversion library to create JSON, CSV, and XML files from a proprietary file format.
- Collaborating with the team to transition the Viper 4+ build system from qmake to CMake, improving build efficiency and maintainability.
- Debugging the Viper 4+ system software using gdb-multiarch, analyzing embedded system logs, and documenting code with Doxygen.

#### Software Engineer Intern, Raven Industries, Inc.

Sep 2021 - May 2022 | Sioux Falls, SD

- Implemented on-device creation of geospatial vector data format shapefiles for the multiline feature in Raven Operating Software.
- Developed this highly-requested feature for the Field Computer product line using Qt and C++ in an Agile environment.
- Improved the multiline feature to make it more user-friendly and easier to discover enabling farmers to save 60% of their time.

## Software Engineer Intern, Raven Industries, Inc.

May 2021 - Aug 2021 | Sioux Falls, SD

- Collaborated in an Agile team of 8 to implement single sign-on for all 4 customer-facing apps for a secure user-authorization process.
- Undertook displaying telemetry and generating alerts with Grafana to monitor load and throughput of critical services more closely.
- Streamlined infrastructure with Terraform, reduced moving parts, refactored code, and improved documentation.

## Data Analyst Intern, Diamond Mowers

Aug 2020 - May 2021 | Sioux Falls, SD

- Utilized Tableau and R to visualize sales data to aid 3 top executives in making decisions about the company's performance.
- Wrote analytical reports highlighting underperforming regions for all 3 product lines while identifying underlying performance issues.
- Conducted 200+ hours of market research to determine users' key pain points as well as the company's competitive analysis.

#### Software Engineer Intern, Spidreye

Feb 2020 - Jun 2020 | New York, N

- Led a team of 4 to design, develop, deploy, and test a property-review website that gained 75+ users in the first month after launch.
- Implemented Google Maps API to support location autocompletion when a user is searching for properties for faster results.
- Utilized Firebase Authentication for user profiles and sending automated welcome emails through Mailchimp.

### **SKILLS**

Java | C++ | Rust | Swift | Python | JavaScript | SQL | Bash | ReactJS | Qt | QML | Terraform | AWS | Docker | Git

#### **EDUCATION**

#### BA Computer Science and Data Science, Augustana University

Aug 2018 - May 2022 | GPA: 3.75

#### **Honors and Awards**

Global Leader Scholar, Slate Ronning International Scholar, Fred C. and J. Marie Christopherson Scholar, AURAFA Award Recipient

## **PROJECTS**

# **Uni Go,** Founder and Developer

Oct 2023 - Present

- Leading the re-branded development of Ridesio 🛽 to bring an affordable, and communal mode of transportation to college campuses.
- Collaborating with 3 college campuses to integrate Uni Go, delivering a tailored solution that meets the unique needs of each college.

**Health Memo,** Tech Lead

Oct 2020 - Nov 2020

- Led a team of 3 to develop an iOS app to help the elderly manage their chronic diseases and share regular updates with their doctor.
- Utilized EMRs and Google's Text-to-Speech and Speech-to-Text to create a personalized experience for patients.
- Won \$9,000 along with an invitation to work with engineers at Sanford Health for further research and development of the project.

## LEADERSHIP AND AFFILIATIONS

UnderdogDevs, Mentor

Dec 2023 - Present

- Serving as a mentor to aspiring developers who are either formerly incarcerated or from an economically disadvantaged background.
- Conducting weekly meetings with mentees to offer coding practice, interview preparation, resume analysis, and encouragement.

# Office of Diversity and Inclusion, Diversity Peer Mentor

May 2020 – Aug 2021

- Facilitated 10+ educational programs to increase academic, social, and professional opportunities for underrepresented students.
- Increased students' awareness and cultural competency through 1-on-1 mentorship.