# Taha Afzal

#### **WORK EXPERIENCE**

### Software Engineer, Raven Industries, Inc.

May 2022 - Present | Sioux Falls, SD

- Spearheading development of the next-generation Raven Operating Software (ROS) in an Agile team of 7 using 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 convert ROS to use CMake instead of qmake as the build system.
- Utilizing Google Test (gtest) to write unit tests ensuring my code meets the quality standards.
- Debugging ROS with gdb-multiarch, analyzing application and system logs, and documenting code using Doxygen.

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

Sep 2021 – May 2022 | Sioux Falls, SD

- Developed a highly-requested feature for the Field Computer product line using Qt and C++ in an Agile environment.
- Implemented on-device creation of geospatial vector data format shapefiles for the multiline feature in Raven Operating Software.
- Improved the multiline feature to make it more user-friendly and easier to discover enabling farmers to do the same tasks in 60% less 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, restructured repositories 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, NY

- Led an Agile 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++ | Qt | QML | SQL | Git | AWS | JavaScript | Bash | Swift | Python | Docker | Terraform | ReactJS | R

#### **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**

### 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 implemented 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.

### Ridesio, Developer 🛭

Oct 2020 - Nov 2020

- Developed a ride-sharing iOS app for college campuses over 6-weeks to serve as a communal and sustainable way for long-distance travel.
- Collaborated remotely in a team of 4 to develop the app utilizing AWS, MapKit, SwiftUI, and Parse.
- Focused on the UI and practicality of the app to secure 2nd position in CodePath's Demo Day and SF Student Showcase.

## Apple Beta Software Program, Volunteer

Jun 2020 - Sep 2020

- Volunteered in the Apple Beta Software Program, which is about helping Apple to make iOS and macOS releases better.
- Contributed my expertise to find 8+ bugs and improve the UI/UX in 3 key areas for the initial release of iOS 14.

### Midwest Undergraduate Data Analytics Competition (MUDAC), Team Lead ☑

Mar 2020 – Apr 2020

- Led Augustana University's team in MUDAC 2020 a rigorous and prestigious data analytics hackathon.
- Predicted the outcomes of legal cases with 87% accuracy, visualized data on Tableau, and presented the results to SMEs.

#### **LEADERSHIP AND AFFILIATIONS**

## 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.

# Hult Prize, Campus Director

Oct 2019 - Aug 2021

- Worked with students of Augustana and members of the community to provide a platform for the launch of 3 sustainable businesses.
- Achieved a 250% increment in the participation with Augustana's team placing in the top 6 in the U.S. from 5000+ teams.

# CodePath, Developer

Sep 2020 – Dec 2020

- Selected to participate in CodePath's Fall 2020 program from over 1000 candidates in the U.S. to learn iOS app development.
- Re-created apps like IMDb, Twitter, Instagram, and Mario Kart to build my portfolio and network.

# Augustana eSports Club, Founder & President 🗷

Oct 2018 - Aug 2020

• Founded Augustana's eSports Club to foster and bring together the gaming community by hosting over 6 tournaments.