

# Taha Afzal

✉ tahaafzal5@hotmail.com ☎ (224) 522-3432 📍 Sioux Falls, SD in tahaafzal5 🌐 tahaafzal5

## 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++.
  - Developing software in a 3-tier architecture (Client, Server, and Database) while consistently following best practices.
  - Specifying, prototyping, developing, and testing applications built with Model-View-Controller (MVC) architectural pattern.
  - Leading the enhancement of a file conversion library to create JSON and CSV files from a proprietary file format.
  - 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 Computers 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.

## TECHNICAL SKILLS

### Intermediate

Docker, Terraform, TypeScript, Bash, React, Ansible, R, Grafana

### Advanced

Java, C++, Qt, QML, SQL, Git, AWS, JavaScript, Python, Swift

## 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

- Ridesio**, Developer 📄 Oct 2020 – Present
- Developing a ride-sharing iOS app for college campuses over 6-weeks to serve as a communal and sustainable way for long-distance travel.
  - Collaborating remotely in a team of 4 on the front and back ends of the app to implement MapKit and Parse.
  - Focused on the UI and practicality of the app to secure 2nd position in CodePath's Demo Day and SF Student Showcase.
- Sanford HealthHack**, 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.
- 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.

## 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.
  - Increasing 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 top 6 in the U.S. from 5000+ teams.
- CodePath** 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 the first and only eSports club at Augustana to foster and bring together the gaming community.
  - Hosted 10+ game nights, 6 tournaments, and 10 educational sessions on ethics and sportsmanship in eSports in the past year.