

Ali Ahmed Khan

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EDUCATION

UNION COLLEGE

B.E IN COMPUTER ENGINEER

June 2022 | Schenectady, NY

Dean list 2019,2020

Cum. GPA: 3.65 / 4.0

Major GPA: 3.8 / 4.0

LINKS

Personal: alikhان.codes

LinkedIn: [Ali Khan](#)

Github: [Ahmed4812](#)

COURSEWORK

Neural Network

Intro to Databases

Data Structures

Algorithm Design & Analysis

Computer Network Protocols

Computer and Logic Design

Embedded Micro-controller

SKILLS

Programming Language:

- Python • Java • Javascript
- C • Bash • Matlab
- HTML • CSS • Arduino
- \LaTeX • Pbasic • VHDL

Framework & Libraries:

- NodeJS • React Native
- TensorFlow • ExpressJS
- Flask • OpenCV • NumPy
- Pandas • Matplotlib

Software & Operating System:

- Postman • Linux OS
- Mac OS (Unix) • Windows
- Jupyter Notebooks
- LaTeX • MS Office

DataBase

- MySQL • Firebase
- MongoDB

Other

- Git • Digital Ocean
- Agile Framework

RELEVANT EXPERIENCE

NEZZ INC | SOFTWARE ENGINEERING INTERN

Jan 2020 - Present | San Francisco, CA

- Restructuring and adding new features in the backend of on-production iOS app "TooDeep" to improve response time using Nodejs and Express following Agile project management.
- Managing large user traffic of 456 weekly active users by utilizing databases and server-service using MongoDB, Firebase and Digital Ocean.
- Developing an AI bot using Tensorflow and Google AutoML Natural language to identify suicidal behaviors among users and provide helpful resources.

UNION EVOROBO RESEARCH | RESEARCH ASSISTANT

January 2019 - Present | Schenectady, NY

- Working on a physics simulator to optimize voxel based robots' movement through genetic algorithm for practical experiment using Java and Python.
- Implemented machine learning algorithms in order to find interesting behavior of tensegrity robot for space and land exploration using MapElites and Bayesian Optimization.
- **Publication:** 2020 IEEE Symposium Series on Computational Intelligence (SSCI), Canberra, Australia, 2020, pp. 2265-2271, doi: 10.1109/SSCI47803.2020.9308218.

THE SAD PROJECT | SOFTWARE DEVELOPER

June 2020 - Present | Schenectady, NY

- Creating a cross platform dating app with another engineer for a Facebook group to help the members with an organized, fast and efficient search system.
- Utilizing tools such as React Native, Firebase, Socket.io, and Jira.

COMPUTER ENGINEERING DEPARTMENT | TEACHING ASSISTANT

January 2021 - Present | Schenectady, NY

- Graded assignments and tests by fixing coding errors and providing feedback to help students write more readable and maintainable code.
- Held office hours to consolidate students' understanding on topics covered in class.

LEADERSHIP EXPERIENCE

UNION ROBOTICS CREW | PRESIDENT

September 2018 - Present | Schenectady, NY

- Directing a multidisciplinary team of 18 members for the IEEE micro-mouse competition.
- Implemented a flood-fill algorithm with Python and Arduino language to solve a maze for the competition.

ACADEMIC OPPORTUNITY PROGRAM | COMPUTER AND ELECTRIC ENGINEERING TUTOR

June 2020 - Present | Schenectady, NY

- Tutoring students with Computer Science and Electrical Engineering concepts along with fixing bugs for projects.
- Assisting Professors with grading and editing slides.

UNION COLLEGE | RESIDENT ADVISOR (RA)

September 2020 - Present | Schenectady, NY

- Helping 150 first year students to transition comfortably during the COVID-19 outbreak by following protocols.
- Building a community among the students by organizing inclusive programs in a safe environment.