#### Shashwath Udaya Kumar

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#### **EDUCATION**

 Northeastern University Master's in Computer Science Jan 2024 - May 2026

Portland, Maine, United States

• Relevant Coursework: Programming Design Paradigm, Data Structures and Algorithm, Machine Learning, Web Development

Texas Tech University

Aug 2018 - May 2022

Bachelor's in Computer Science

Lubbock, Texas, United States

 Relevant Coursework: Human-Computer Interaction, Software Engineering I, Object-Oriented Programming, Concepts Of Programming Languages, Computer Architecture, Design/Analysis Of Algorithms

#### EXPERIENCE

• Northeastern University [#]

Aug 2024 - Present

Proctor / Multimedia Support Technician

Portland, Maine

- Facilitating faculty by managing classroom technology, focusing on delivering course content to engage learners.
- Providing Python coding support to learners within and outside of the classroom.

Fredie Mac [ ]

Jun 2023 - Nov 2023

Software Development Engineer

Virginia, United States

- Developed automated test scripts to improve code quality and reliability increasing efficiency by at least 15%.
- Conducted API testing for RESTful services using automated scripts to validate functionality, reliability, and performance.

# **PROJECTS**

## Maze-godot: [Comparative Analysis Of Pathfinding Algorithms]

March-2024

*Tools: Godot Engine 4.x and C#* 

• Developed using Godot engine for finding the most optimal path-finding algorithm.

- Implemented a 2D maze game and evaluated BFS, Dijkstra's, and A\* algorithms for pathfinding.
- Created a Custom component for optimized performance to highlight that A\* is the most efficient algorithm

#### • Jingle: [Music Application with Recomendation System for the Users]

July 2024

Tools: [SP, Servlets, HTML, CSS, JavaScript, Python, Flask]

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• Developed a dynamic music app using Web Technoligies mimicking Spotify.

 Implemented the music recommendation feature using collaborative filtering increasing user engagement with the application by at least 70%.

#### Credit-Card Fraud Detection: [Detection of fraudulent Credit-Card transactions]

Iun 2024

Tools: [Pandas, NumPy, Scikit-learn, Matplotlib, Jupyter notebook]

- · Took a sample 492 data from the legit transactions and used Logistic Regression ML algorithm to predict whether a transaction is legit or fraud.
- The Accuracy of this algorithm is 92.89% We can increase the accuracy of the algorithm by using the Synthetic Minority Oversampling (SMOTE).

# • Housequest: [Better ways to find housing in a certain location]

April 2024

Tools: [JSP, HTML, CSS, JavaScript, MySQL]

- Developed a house quest application to find the nearest housing option with greater efficacy using different Algorithm's.
- Implementation based on the selected location using Dijkstra's algorithm proved to work well for this project.

## SKILLS

- Programming Languages: Python, JavaScript, TypeScript, Java, C++, C, C#, Ruby
- Web Technologies: HTML, CSS, Tailwind CSS, React, Node.js, Flask, Django, Springboot, Ruby on Rails
- Database Systems: MySQL, PostgreSQL, MongoDB
- Data Science & Machine Learning: Pandas, NumPy, Scikit-learn, TensorFlow, Keras, Matplotlib, Apache Spark
- Cloud Technologies: AWS, Azure, GCP
- DevOps & Version Control: Docker, Kubernetes, Jenkins, Git, GitHub
- Specialized Tools: Google Workspace, Google Colab, Microsoft Suits, Apache Kafka, Smartsheets, Nearpod
- Mathematical & Statistical Tools: MATLAB, SciPy, R
- Other Tools & Technologies: Visual Studio Code, JIRA, Slack, Postman, Figma, Jupyter notebook
- Research Skills: Data Analysis, Qualitative Research, Experimental Design