Omer Karimi

413-800-5109 | omerkarimi29@gmail.com | github.com/itsKia2

Relevant Links: LinkedIn | GitHub

Programming Languages: Java, Python, Javascript, Typescript, SQL, C/C++, HTML/CSS **Frameworks:** ReactJS, React Native, Tensorflow, Node.js, Pandas, NumPy, Django

Technologies: Git, Linux/Unix, Vim, Emacs, Agile, Scrum, Firebase, MySQL, MongoDB, SSH, LaTeX, Excel, Jira

EDUCATION

University of Massachusetts, Amherst

May 2025

BS Computer Science, concentration in Software Engineering and Databases

PROJECTS

LeetBank | Demo | Github Code | (React, Node.js, ExpressJS, Javascript, Firebase)

2024

- Developed a full-stack app for storing, annotating, and categorizing LeetCode questions, streamlining coding practice
- Built search algorithm that can access LeetCode questions 40% faster, optimizing 6 API calls into one GraphQL request
- Ensured a user-friendly interface and robust performance with comprehensive testing and API integrations

Thinkerly: Productivity Enhancement | Github Code | (React Native, SQLite, Expo, Typescript)

2024

- Developed cross-platform Android/iOS app; increasing productivity by 63% through targeted focusing methods
- Optimized app load time performance by 43.4% through lazy loading non-essential files; providing smoother experience
- Designed an interactive, responsive UI with retention techniques, improving task completion time by 30+ min

Artificial Neural Network Project | (Python, NEAT, PyGame)

2023

- Developed neural network in Snake game utilizing NEAT library, outperforming humans by generation 10
- Implemented Q-learning algorithm enabling program to adapt over time to 3 game environment factors
- Incorporated back propagation techniques to finetune weights and biases, improving efficiency and learning

Spotify Recommendation System | Github Code | (Python, pandas, scikit-learn, Django, Spotipy)

2023

- Applied statistical functions and weighted algorithms to normalize song attributes; enhancing personalized playlists
- Implemented OAuth 2.0 for user authentication to connect to Spotify; ensuring privacy and tailored results
- Optimized recommendation algorithm by 12% through genre grouping, enhancing the diversity of recommended songs

WORK EXPERIENCE

Office of Faculty Development, UMass Amherst

August 2022 - Present

Office Assistant

Amherst, MA

- Engineered Python script to automate data reports and trend analysis across campus; saved 27 hours of manual work
- Designed and distribute 150+ campus-wide Qualtrics surveys annually for 2,000+ faculty, optimizing data collection
- Improved office efficiency overall by 25% through migrating to cloud tools, streamlining workflows

Pakistan Student Organization

April 2023 - Present

Secretary

Amherst, MA

- Directed the planning and execution of large-scale cultural awareness events; attracting 500+ multi-cultural attendees
- Led outreach and marketing efforts to other organizations; boosted member count by 34%

Walmart May 2023 - July 2023

Front-End Associate

Hadley, MA

• Utilized POS systems to process \$7,000+ daily; ensured consistent customer satisfaction in fast-paced environment

Nakshbandi Textile

June 2022 - July 2022 Karachi, Pakistan

Business and Accounting Intern
Leveraged Excel Pivot Tables and VLOOKUP to analyze and streamline large-scale production data into dashboards

Haque Academy

June 2022 - July 2022

Event Management Intern

Karachi, Pakistan

- Taught coding logic and core game development principles to kids aged 6-8 via Scratch, resulting in interactive projects
- Utilized project-based learning to teach user interface design, fostering problem-solving and creative thinking

AWARDS

Dean's List

University of Massachusetts, Amherst

2022 - Present

Chancellor's Award

University of Massachusetts, Amherst

2022 - Present

COURSES & CLUBS

Relevant Courses: Software Engineering, Practice and Application of Databases, Application of Data Management, Operating Systems, Design and Analysis of Algorithms, Data Structures, Human Computer Interaction, Discrete Math **Clubs:** Pakistani Student Organization, Cybersecurity Club, Lettuce Club