Aishwarya S. Tomer

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Website | LinkedIn | GitHub

Education

- **Goldsmiths, University of London** *September 2021 - Present*

  Bachelors in Computer Science
- **Selected Courses**

  Data structures and algorithms, Databases and networking, Operating systems, Machine learning, Data mining

Experience

- **Samsara** *June 2024 - Present*

  Software Engineering Intern
  - Contributed to milestones, risk assessment, and rollout strategies for successful, minimal-impact implementation.
  - Developed a new SQL table for storing global overrides based on customer-provided speed limit corrections.
  - Implemented logic to validate, process, and store high-confidence speed limit overrides from various customers.
  - Worked with teams to align and approve the project approach, validating fleet safety and data accuracy impacts.
- **SyntHeim** *July - September 2023*

  Software Engineering Intern
  - Implemented the backend of admin panel and real-time notification system for the social media app using Python.
  - Added secure user authentication and role-based access control, to enhance the overall system security.
  - Developed content moderation tool and a reporting system to handle problematic user-generated content.
  - Utilized websockets to provide critical event alerts for user reports, enabling timely responses by administrators.
- **GitHub** *October 2023*

  Hacktoberfest'23
  - Contributed solutions to complex coding challenges, showcasing proficiency in data structures and algorithms.
  - Collaborated with the open-source community to provide high-quality python solutions to algorithmic problems.
  - Gained experience in version control, open source and collaborative development using GitHub.

Projects

- **Predictor** *GitHub*

  Machine Learning Application
  - Developed a ML application to predict oral temperatures and classify fever using infrared thermography data.
  - Trained various models including Linear Regression, Decision Tree, Random Forests and Neural Networks.
  - Evaluated models using metrics such as RMSE for regression, and accuracy, precision, recall for classification.
  - Achieved 92% accuracy in predicting oral temperatures and 96% precision in identifying fever cases.
- **Strategist** *GitHub*

  AI-Powered Tetris Gameplay
  - Created an AI capable of playing Tetris by assessing move effectiveness using a combination of heuristic metrics.
  - Developed an evolutionary algorithm to fine-tune the weights linked to different factors affecting move selection.
  - Performed extensive testing to evaluate the AI's performance in diverse game scenarios to refine decision-making.
- **CoinInsight** *GitHub*

  Crypto Exchange Data Analyzer
  - Created a CLI program in C++ for analyzing exchange data stored as CSV file for cryptocurrency investors.
  - Developed advanced command parsing, including error handling and data validation, to ensure accurate analysis.
  - Utilized object-oriented principles for abstraction, encapsulation, reusability, scalability, and organization.

Achievements

- **FooBar Challenge - Google**, Qualified for solving multi-stage algorithmic problems with hidden test cases.
- **Competitive Programming - LeetCode**, Achieved a global rank of 1232 among 54528 participants.
- **Animation Contest**, Won university-award for best animated adaptation of *Thirsty Crow* using p5.js library.
- **A Levels Equivalent**, Achieved A* grade in Computer Science while studying in Shri Ram Public School.

Technical Skills

- **Programming Languages**: C++, Python, Go, C#
- **Web Technologies and Frameworks**: HTML, CSS, JavaScript, React, Express, SQL
- **Libraries and Toolkits**: Scikit-learn, Pandas, NumPy, Git