Avinash Vadivelu

Richardson, TX 75080 | (281) 858-3848 | avi.chetty2002@gmail.com | Personal Website | LinkedIn

EDUCATION

Bachelor of Science in Computer Science

The University of Texas at Dallas, Richardson, TX

Master of Science in Computer Science

The University of Texas at Dallas, Richardson, TX

Anticipated Dec 2024

GPA: 3.60

Anticipated Dec 2025

GPA: 3.56

Relevant Coursework: Discrete Math for Computing, Linear Algebra, C/C++ Programming in Unix Environment, Computer Architecture, Data Structures and Algorithm, Software Engineering, Operating Systems, Machine Learning, Database Design, Big Data Management and Analytics, Web Programming Languages, Natural Language Processing

TECHNICAL SKILLS

Languages/Frameworks: Java, C++, Python, Django, JavaScript, React, Angular, TypeScript, HTML, CSS
Technologies/OS: AWS, GCP, Azure, Oracle Cloud, SQL (MySQL, PostgreSQL), MongoDB, macOS, Windows 10, Linux/Unix
Machine Learning/Data Analytics: Apache (Hadoop, Spark, Hive, Kafka), Pandas, Scikit-learn, Matplotlib, Seaborn, Pytorch
Software Tools: Agile, Docker, Power BI, REST, Git, VS Code, IntelliJ, JUnit, MSOffice, Google Suite, Jira, Confluence

CERTIFICATIONS

AWS Certified Cloud Practitioner

Jun 2023 – Jun 2026

Oracle Cloud Infrastructure 2023 Certified Foundations Associate

Jul 2023 - Jul 2025

PROJECTS

Social Media App | React, Node.js, Express.js, Mocha, HTML, CSS, Git, MongoDB

- Simulated multiple functionalities of Facebook, including user authentication and interactive posts with likes/comments.
- Constructed 5 different APIs that implements the inner workings of the app with respect to the back end.
- Implemented a dynamic social media feed to enhance user interaction and engagement with the front end.

Real-time Basketball Player Analytics Dashboard | Django, PostgreSQL, AngularJS, REST API, CSS, HTML

- Designed and implemented a dynamic player performance dashboard by enabling real-time synchronization between user-selected player data and summarized game statistics.
- Transported approximately 800 lines of JSON data to a PostgreSQL database with the use of Django models.
- Optimized API integration by leveraging RxJS observables and BehaviorSubjects to ensure efficient and responsive data fetching, minimizing redundant network calls and enhancing application performance.

Automotive OSS Survey (Toyota Tsusho Systems) | Linux, Python, JavaScript, HTML, Git, Firebase, Agile, Jira/Confluence

- Researched the usage of Open-Source Software in the automobile industry with 5 other people.
- Reverse engineered 4 Firmwares to uncover various OSS/libraries within them and identify Common Vulnerabilities and Exposures (CVE).
- Participated in weekly sprints and team meetings where I was either a meeting leader or a scribe.

Personal Portfolio | JavaScript, HTML, CSS

- Developed a responsive a personal portfolio website detailing my background, skills, projects, and certifications.
- Implemented interactive features such as a dynamic project gallery and contact form to enhance user engagement.
- Designed a clean and intuitive layout with animations and transitions for a professional user experience.

Stock Predictor | Python, Pandas, Scikit-learn, Matplotlib, NumPy

- Developed a Recurrent Neural Network (RNN) from scratch with a team of 4 that is capable of forecasting stock close prices based on historical data with an accuracy of 85%.
- Utilized Matplotlib to compare our model's prediction of the stock's close price with the actual data in the dataset.
- Organized meetings and helped delegate tasks within my team on a weekly basis.