Animesh Srivastava

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https://animatrix28.github.io/ | Los Angeles, California

Education

University of Southern California,   August 2023 – May 2025 | Los Angeles, USA
Master of Science in Computer Science (GPA: 3.6/4)

MS Ramaiah University of Applied Sciences,   August 2017 – June 2021 | Bangalore, India
Bachelor of Technology in Computer Science and Engineering (GPA: 3.67/4)

Professional Experience

Software Engineer and Researcher, Easley Dunn Productions   June 2025 – Present | Los Angeles, USA
- Developed an interactive VR surgical training prototype in **Unity** using **C#** and the **XR Interaction Toolkit**, implementing an immersive **floating UI** (diegetic UI) with event-driven logic for tool selection, equipping, and **physics-based** handling (**Rigidbody** manipulation).
- Engineered a session record-and-replay system in **C#** for training assessment, with **JSON** data persistence to save and load user progress.
- Scripted unique **C#** interaction logic for virtual tools (scalpel, drill, marker) to enable procedural drawing and object interaction on **3D anatomical models** in a **VR environment**.
- Designed and debugged the tool state management lifecycle for seamless **User Experience (UX)**, correctly parenting objects to controllers and managing tool-swapping logic.

Software Engineer(Founding Engineer), Redvest   May 2024 – October 2024 | Los Angeles, USA
- Designed and implemented scalable financial **data pipelines** using **Python multithreading** and **Firebase**, reducing data latency by **40%**.
- Built a **React**-based analytics dashboard for real-time financial metric visualization, improving operational efficiency.
- Led MVP feature development aligned with investor and user requirements, managing **30+ GitHub** PR merges to ensure timely delivery.
- Presented Redvest at **TechCrunch Disrupt 2024**, increasing platform visibility and driving early user adoption.

Backend Developer, American Express(via TCS)   January 2021 – July 2023 | Bangalore, India
Worked on two projects, **IDL (Indian Data Localization)** & **Travel and Lifestyle Services**
- Improved compliance by **reducing data risk by 50%** through **OFSAA** and **PL/SQL** validation and migration of 30+ regulatory guidelines.
- Automated report retrieval, data comparison, and discrepancy resolution with **Java**, saving 20 hours per week of manual work.
- Developed **ETL** pipelines using **PySpark**, **Python**, and **PL/SQL**, integrating with **MongoDB** for 100% accuracy in data processing.
- Fixed **MySQL** job failures and implemented **JSON** path validation to enhance data ingestion precision.
- Built and deployed 5 backend features to support business logic and improve customer experience.
- Monitored **SQL** jobs in production to ensure system reliability and minimize downtime.

Projects

Contortion – 2D Platformer Game | Unity, C#, Firebase, GitHub ⚯   October 2024 – December 2024
- Built **core game mechanics**, including gravity manipulation, teleportation, and interactive dynamic obstacles, using **Unity** and **C#**.
- Integrated real-time analytics with **Firebase** and **Python**, tracking player interactions, deaths, and level progression for balancing and gameplay improvements.
- **Enhanced UI/UX** and level design through iterative **playtesting**, enhancing game balance, engagement, and user experience.

US Stock Market Portfolio | React.js,Express.js,Node.js,MongoDB,Android,GCP, jQuery,Flask,AWS ⚯   March 2024
- Built a **responsive**, full-stack stock market analysis platform using **React.js**, **Bootstrap**, and **Node.js**, enabling seamless integration of real-time stock data fetched from **Finnhub API** with **MongoDB** backend and deployed the application on **AWS**.
- Implemented **RESTful APIs** in the backend for real-time updates on price history, market trends, and user-specific portfolio tracking, enhancing usability and system reliability.
- Developed an **Android** application 'Stocks' in **Java** using the same **Node.js** backend ensuring cross-platform accessibility. *(Link to the App)*
- Previously built an earlier version in **Flask** with **jQuery** and **AJAX** using **Finnhub API**, deployed on **Google Cloud**.

Trip Planner and Recommender using Flutter and Tensorflow, | Flutter, TensorFlow, Python   January 2021 – June 2021
"Published research paper at IEEE" ⚯
- Scraped TripAdvisor data & utilized **ETL** techniques & developed a trip-planning **recommendation system** using **TensorFlow** and **collaborative** & **content-based** filtering techniques, delivering highly personalized suggestions based on user preferences.
- Designed and deployed a **Flutter**-based app with a seamless interface, integrating the recommendation model to provide tailored suggestions based on individual preferences and interests. Incorporated user feedback for a cohesive and visually appealing experience. *(Link to the App)*

A Conceptual Model Simulation to Detect and Report City Traffic Violations Using Distributed   February 2020 – July 2020
Intelligent Agents, "Published research paper at IEEE" | Java, MySQL ⚯
- Designed a simulation model in **Java** for detecting and reporting traffic violations in real-time using the **multi-threading** concept, integrating it with **MySQL** for scalable database support enabling automatic updating of traffic violation records.

Skills

Programming Languages: Python, Java, C, JavaScript, TypeScript, C++, Dart
Web and Backend: React.js, Node.js, Express.js, Flask, Django, Angular, jQuery, HTML, CSS, XML
Game Development: Unity, C#
Mobile Application Development: Flutter, React Native, Java, Android Studio
Database & Tools: MySQL, PL/SQL, MongoDB, Firebase, Hive & Spark, OFSAA, Hadoop, NoSQL, DynamoDB
Cloud & DevOps: AWS, Google Cloud, Git, GitHub Actions, Docker
Other Tools: Figma, Jira, Photoshop
Methodologies: Agile, Scrum, CI/CD Pipelines