

AVI MEHTA

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EDUCATION

Virginia Tech

May 2023

B.S. in Computer Science, Cum Laude

Relevant Coursework: Object-Oriented Programming, Data Structures, Algorithms, Computer Systems and Networks, Human Computer Interaction, Cryptography, Combinatorics, Statistics and Applications, Discrete Math

WORK EXPERIENCE

Truist

Charlotte, NC

Data Scientist

Dec 2024 - Present

- Develop and enhance predictive models and simulations for Comprehensive Capital Analysis and Review (CCAR) and Current Expected Credit Loss (CECL) regulatory requirements
- Analyze financial datasets to identify trends and improve risk assessment and capital planning

Business Intelligence Engineer

June 2023 – Nov 2024

- Executed anomaly detection and predictive analytics for Anti-Money Laundering operations on millions of transactions extracted using SAS, significantly enhancing regulatory compliance and increasing high-risk entity identification accuracy by 9%
- Developed and optimized data pipelines, processing over 100 million records, to support forensic and compliance investigations
- Architected an audit sampling tool replacing a manual, error-prone system and saving 85% of time, significantly boosting operational efficiency
- Built predictive models to forecast Adjustable-Rate Mortgage portfolio performances, reducing overall risk exposure by 12%
- Refactored ETL processes, resulting in 20% faster financial data extraction and data loading operations
- Deployed a fuzzy logic-based inference system by extracting data from Very Large Databases (VLDB) and integrating the Office of Foreign Assets Control (OFAC) sanctions list, reducing compliance review time by 30%

Virginia Tech Department of Computer Science

Blacksburg, VA

Undergraduate Teaching Assistant | CS3724 Human Computer Interaction

Aug 2022 - May 2023

- Held weekly office hours, assisted the professor in writing test and homework material, and graded exams of 150+ students
- Led discussion sections of 48 students weekly, working through problems interactively

Blankly Finance (Backed by Contrary Capital and Rough Draft Ventures)

Ann Arbor, MI

Software Engineer Intern

Oct 2021 - May 2022

- Engineered a scalable end-to-end user registration flow using React, Flask, and Firebase, with comprehensive unit, integration, and end-to-end test coverage using Pytest and Cypress
- Increased Blankly supported exchange integrations by 50% leveraging RESTful APIs and web sockets
- Built and deployed trading bots using the Blankly API, leveraging Docker and AWS EC2, to allow users to simulate trades

The Consulting Group at Virginia Tech

Blacksburg, VA

Technology Consultant

Oct 2020 - May 2022

- Constructed a cybersecurity system for smart vehicles and conducted A/B testing to evaluate and mitigate vulnerabilities
- Drove M&A due diligence for a fintech merger, emphasizing on WealthTech, blockchain, and digital banking markets
- Orchestrated a 5G adoption and utilization roadmap for a healthcare client leveraging scientific and market research

Brands on Road

Bangkok, Thailand

Software Engineer Intern

June 2020 - Aug 2020

- Constructed a standard client onboarding pipeline utilizing React.js and Bootstrap, cutting onboarding times by 45%
- Automated data migration process from MySQL to MongoDB, using JavaScript, reducing manual data retrieval time by 30%

SKILLS

Languages:

Python, Java, JavaScript/TypeScript, C/C++, Rust, SQL, SAS, HTML/CSS

Technologies & Frameworks:

React, Flask, Node, Next.js, Express, Postgres, MongoDB, GraphQL, Hadoop, Hive, FastAPI

Libraries:

TensorFlow, Pandas, NumPy, Matplotlib, Scikit, OpenCV

Infrastructure:

Linux, Git, Docker, Kubernetes, AWS, GCP, Azure, Azure DevOps

PROJECTS (View all on avimehta.info)

WebNotes: React, Next.js, Typescript, Postgres, Auth0, Vercel

- Built a full-stack app with robust Auth0 user authentication, allowing users to create, store, and search through their notes
- Executed server-side logic utilizing Vercel's serverless functions, ensuring both efficient and scalable data processing

ChefMeUp | Senior Design: React, Typescript, Python, Flask (Industry Choice @ VTURCS 2023)

- Launched a mobile app addressing food insecurity by enabling users to find affordable groceries and recipes nearby
- Implemented a Flask server with search endpoints and API integrations for real-time grocery store and recipe data