

Maanav Choudhary

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Software Engineer with experience building Angular/React frontends and REST APIs in .NET and Flask for enterprise applications. Delivered features used by 100+ internal users.

EDUCATION

Rutgers University, School of Arts and Sciences | New Brunswick, NJ | May 2025

B.S. in Computer Science | B.S. in Cognitive Science | Minor in Philosophy | GPA: 3.67

TECHNICAL SKILLS

Languages: Python, C#, Java, JavaScript, TypeScript, C

Tools/Cloud: AWS (EC2), Azure DevOps, RESTful APIs, Microservices, CI/CD, Git, Jupyter

Frameworks: React, Angular, .NET, FastAPI, scikit-learn

PROFESSIONAL EXPERIENCE

Software Engineer Rotational Program | PNC Bank | Dallas, TX | August 2025-Present

- Developed full-stack features for dashboards accessed by internal users across multiple business units.
- Built REST API endpoints in C#/.NET to surface data from MongoDB and map it to usable front end data.
- Significantly improved table render performance for datasets with 48,000+ records through AG Grid migration.
- Implemented column sorting, multi-criteria filtering, and row-based navigation in Angular using AG Grid.
- Collaborated closely with product owners and senior engineers on UI and filtering behavior in Angular.
- Implemented comprehensive unit testing, 80%+ code coverage, with SonarQube, ensuring high reliability in CI/CD releases.
- Utilized generative AI tools to analyze new codebases and tighten scope reports to help other developers.

Machine Learning Intern | PNC Bank | Pittsburgh, PA | May-August 2024

- Engineered an automated quality-control backend service, significantly reducing SOX compliance review time through modular Python services integrating unsupervised components.
 - Optimized high-volume data pipelines (100K+ rows) using vectorization, and modular preprocessing functions.
 - Designed reusable preprocessing and ensemble modules (Local Outlier Factor, Isolation Forest) with performance logging, improving throughput and scalability.
 - Built a collaborative analytics dashboard in JupyterHub with shareable templates, streamlining workflows across risk.
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PROJECTS

Apartment Copilot | Personal Project

- Designed a user-friendly front end in React, paired with an asynchronous FastAPI backend with deduplication and polling, supporting real-time ranking of 200+ scraped listings with AI scoring.
- Engineered a lightweight data persistence layer using SQLite, enabling low-latency updates and real-time dashboards.

Gym Crowd Tracker – Health Track Winner | HackRU 2022

- Developed and deployed a real-time occupancy tracker to AWS within 24 hours, integrating Python backend + Streamlit frontend to process crowd-sourced data with dynamic updates.
- Implemented asynchronous data ingestion and caching layer to handle concurrent user submissions, improving real-time update reliability and scalability for 40+ concurrent users.

User-Level Thread Scheduler | Operating Systems Course

- Built a threading library in C with custom Thread Control Blocks, context switching, and mutex-based synchronization.
 - Implemented a Shortest Job First scheduler with timer interrupts and atomic operations for efficient concurrency.
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LEADERSHIP & PASSIONS

Writing & Film: Author of essays and poetry; currently working on my first novel and developing a personal documentary film.

Interim Scrum Master: Led scrum for team at PNC while scrum master was absent, recorded team progress and noted obstacles.