Nathaniel Sawant

Available from Sep. 2024 - Dec. 2024

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EDUCATION

Northeastern University, Khoury College of Computer Sciences

Boston, MA

Bachelor of Science in Computer Science, Concentration in Artificial Intelligence

Sep. 2021 - May 2025

GPA: 3.69/4.00

Leadership: Northeastern University IEEE Chapter (President, Fall 2023)

Clubs: NUIEEE (Professional), NUHOC (Outdoors), NUPiC (Photography), Generate (Product Development)
Relevant Courses: Database Management Systems, Machine Learning 1, Digital Design, Object-Oriented Design,

Algorithms & Data, Programming with C++, Artificial Intelligence, Probability & Statistics

TECHNICAL SKILLS

Languages: Go, Java, Python, C, C++, SQL (Oracle, SQLite), Java/TypeScript, HTML/CSS

Frameworks: React, Tailwind, JUnit, FastAPI, Express

Developer Tools: Git, Docker, AWS, GCP, NoSQL (MongoDB), VS Code, Visual Studio

Libraries: OpenCV, pandas, NumPy, Matplotlib, Scikit-learn, Seaborn

Professional Experience

Software Engineer

Jan. 2024 – Apr. 2024

Babel Street

Somerville, MA

- Fix performance bottlenecks (multi-thread downloads 50% faster, better memory usage 20% faster, etc.)
- Made Wikidata to Mongo pipeline using ontology to categorize entities with tool to compare historical changes.
- Developed Python/Maven tool to generate license report of open source libaries used in Maven projects.

Software Data Engineer

Jan. 2023 – Jun. 2023

Fidelity Investments

Boston, MA

- Developed tool for rapid prototyping using company code with VSCode/Jupyter Lab integration.
- Leveraged the ETL process to extract/save dozens of data points for 65,000 items from multiple sites.
- Built Tableau dashboard to help visualize how 100+ databases are used when, how and by whom.

Research Assistant

Oct. 2021 – Aug. 2022

Rehabilitation Games & Extended Reality Lab

Boston, MA

- Assisted in design of database for data collection of participants' eye-tracking captured at 100Hz.
- Inplemented multiplayer gameplay mechanics using Unity 3D engine, OpenXR, and Photon Unity Networking.

Extracurricular Experience

Software Engineer

Sep. 2023 – Present

Generate Product Development at Northeastern University

Boston, MA

- Designed REST APIs using MongoDB, Go, and the Echo web framework along with unit tests.
- Implemented user registration frontend with React, React Hook Form, and Tailwind
- Deployed microservice on AWS to estimate price of 3D print using modified open-source slicer.

PROJECTS

Gear Rental Site | TypeScript, Postgres, Prisma, Next.js, tRPC, NextAuth.js

Apr. 2024

- Led design and development for gear rental website used for club with 150+ members.
- Created frontend design with Figma with shared consistent design (fonts, components, palette, etc.)
- Implemented gear rental system with gear item checkout/return, SSO authentication and reminders.

Reinforcement Learning Agent | PyTorch, Unity, C#

Mar. 2023

- Trained and tested reinforcement learning agent that seeks target in unknown environment.
- Integrated model with Unity for training and testing in virtual environment.

Brand Presence Tool | Azure Cognitive Services, OpenCV, Python, Git

Jul. 2022

- Created analytics tool to detect brand presence in sponsored videos to measure brand metrics.
- Developed as a prototype for Disrupt's Finnovate startup program, winning first place.