Neil Israni

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Education

Northeastern University *September 2023 – May 2026*
Master of Science in Computer Science, GPA: 3.6/4.0 *Boston, MA*
Relevant Coursework: Scalable Distributed Systems, Data Structures & Algorithms, Object-Oriented Design, Web Dev, Artificial Intelligence, Database Management

Grinnell College *August 2018 – May 2022*
Bachelor of Arts in Biology and Anthropology *Grinnell, IA*
Relevant Coursework: Data Science, Statistical Modeling

Technical Skills

Languages: Python, C, Java, Go, SQL, TypeScript, JavaScript, HTML, CSS
Tools: Docker, AWS, MySQL, Github, GCP, Dask, Spark, Jupyter, CI/CD, Gitlab, PostgreSQL, Kubernetes

Work Experience

Chloris Geospatial *June 2025 – December 2025*
Software Engineering Intern *Boston, MA*

- Built ETL pipelines in Python using parallel computing in Dask and Xarray to process and transform 200+ TB of NASA satellite data on AWS EC2 servers
- Implemented SQL functions in PostgreSQL on RDS databases to apply data corrections to 22,000+ geospatial tiles
- Containerized NASA API dependencies with Docker and deployed via GitLab CI/CD to AWS ECS
- Implemented data pipelines for ML-based detection of similar forest growth trends using scikit-learn and pandas
- Optimized AWS Batch and Step Functions workflows for quality control of satellite imagery datasets, reducing AWS S3 cloud storage costs and improving data reliability by 30%
- Tested 40+ stages of biomass prediction workflows, streaming AWS Lambda outputs as JSONs to DynamoDB
- Developed integration test suites in Pytest and xdist for ML code denoising 25 years of satellite timeseries data
- Engineered 6-stage unit test module for cross-functional project supporting the rollout of novel VM47 geodata protocol to predict reforestation in customer sites

Lankenau Institute for Medical Research (Main Line Health) *June 2022 – March 2023*
Biomedical Research Assistant *Philadelphia, PA*

- Developed nanostructure-based siRNA delivery systems targeting IDO2 enzyme for rheumatoid arthritis
- Analyzed proteomic datasets in R to identify novel inflammation pathways in autoimmune disease research
- Implemented a database management system in Excel, optimizing laboratory management and compliance

Projects

Sketch Pad Application (Java MVC) — Repo

- Developed an MVC-based drawing application with a Spring Boot backend managing RESTful APIs
- Wrote comprehensive JUnit tests achieving 98% code coverage across frontend and backend modules

Health Coach Application (Data Engineering) — Repo

- Built a Python application using Apache Spark to generate analytics on 10+ fitness metrics from wearable devices
- Designed SQL database schema and ETL pipelines using FastAPI to aggregate streaming biometric data

Go Microservices on AWS (Terraform, Docker) — Repo

- Architected a distributed system with three Go microservices communicating via REST APIs
- Provisioned AWS EC2 infrastructure using Terraform and orchestrated deployments with Docker Compose

Reddit Clone Website (TypeScript, MongoDB, React) — Backend — Frontend

- Built a full-stack web app with React & Redux frontend and Node.js REST API backend, integrated with MongoDB
- Validated core API flows using Postman collections with environment variables and automated request tests