Neel Shah

Software Engineer | College Park, MD
(732) 925-1305 | neelshah400@gmail.com | neelshah.dev | github.com/neelshah400 | linkedin.com/in/neelshah400

EDUCATION

University of Maryland | B.S. Computer Science, Minor in Statistics — College Park, MD | Aug 2021 – May 2024
GPA: 4.0/4.0 | Honors: Dean's List; College Park Scholars: Environment, Technology, & Economy citation

EXPERIENCE

University of Maryland | Teaching Assistant — College Park, MD | Jan 2023 – Present
- Teaching assistant for CMSC131: Object-Oriented Programming I, an introductory computer science course taught using Java
- Conducted weekly office hours, providing guidance to students on class material and project-related questions
- Graded quizzes, exams, and projects for style and accuracy, offering constructive feedback to enhance students' understanding

Morgan Stanley | Technology Summer Analyst — New York, NY | Jun 2023 – Aug 2023
- Enabled individuals within Lending Products & Services and other teams to quickly draw meaningful insights from data by developing a versatile machine learning platform for model building, evaluation, and predictions
- Developed user-friendly web application using React (TypeScript) for the frontend and Flask/Db2 (Python) for the backend
- Supported complex pipelines with preprocessing and feature selection steps as well as hyperparameter tuning via grid search
- Led the development of a tool for classifying and extracting information from financial documents using OpenAI's GPT-4 model during Morgan Stanley's Generative AI Hackathon

Capgemini Government Solutions | Technical Intern — McLean, VA | Jun 2022 – Aug 2022
- Improved the efficiency of the Software as a Service (SaaS) capability team by leveraging robotic process automation (RPA) to automate the provisioning of users in Salesforce using data exported weekly from an HR system
- Reduced processing time by over 80% and enhanced data accuracy by developing a UiPath attended bot
- Presented findings on viability of virtual reality to top executives, following hands-on testing and extensive market research

Bloomberg | Software Engineering Intern — Dayton, NJ | Jun 2021 – Aug 2021
- Contributed to the Fleet Automation Services team by developing several features for a web application used to manage machine turnaround (maintenance operations) for a fleet of over 30,000 servers
- Provided operators with the ability to set different retry actions per host when rerunning failed jobs, using Angular (TypeScript) for the frontend and Django/PostgreSQL (Python) for the backend
- Created reproducible development/build environments for the Angular frontend by containerizing it using Docker
- Enhanced data visibility by publishing metrics for maintenance events, actions, and failures to a telemetry system via the Django backend and creating a filterable Grafana dashboard displaying time series graphs of these metrics

Bloomberg | Software Engineering Intern — Dayton, NJ | Jul 2020 – Aug 2020
- Assisted the Environment Support Site Reliability Engineering team by providing visibility into data on a fleet of over 30,000 servers, which the team automates machine turnaround (maintenance operations) for
- Developed an interactive web application to visualize metrics such as runtime, failure rates, and failure reasons at the host, schedule, and cluster levels, using React (TypeScript) for the frontend and Django/PostgreSQL (Python) for the backend

PROJECTS

Portfolio Website | neelshah.dev — Aug 2021 – Present
- Created and deployed a responsive, mobile-friendly portfolio website showcasing my skills, education, experience, and projects
- Built the site using React (TypeScript), implementing a component-based approach for easy updates via edits to JSON data

NBA Playoff Predictions | nba.neelshah.dev — Jan 2023 – May 2023
- Analyzed the factors influencing teams' playoff success using Python, going through each step of the data science pipeline
- Accurately predicted the number of playoff games a given team would win by leveraging regular season data to train 8 different machine learning models, with the best (a decision tree) achieving a mean deviation of less than 2.5 games
- Performed an exhaustive grid search with 5-fold cross-validation to find the optimal parameters for each model

SKILLS

Programming Languages: Python, JavaScript, TypeScript, Java, Haskell, OCaml, C, C#, SQL
Web Development: HTML, CSS, React, Angular, Express, Flask, Django
Other: Linux, Git, Docker, Node.js, Android, Unity, UiPath, Grafana, Jira