Neil Bisht

Irvine, CA • neilbst1@gmail.com • https://welcomeneil.github.io • 949-599-5256

EDUCATION

University of California, Irvine – Irvine, CA   Sep. 2022 - June 2024
B.S. in Computer Science, Intelligent Systems Specialization - GPA: 3.7
Activities and Organizations: Tech4Good, Sigma Pi, UCI Design, College Scholars Program, ACM, Tau Kappa Epsilon
Relevant coursework: Software Engineering, Data Structures and Algorithms, Information Retrieval,
Database Management, Machine Learning & Data Mining, Project in Machine Learning

EXPERIENCE

Pacific Life Insurance - Software Engineer Contractor | Newport Beach, CA   Jul. 2024 - Oct. 2024
- Optimized API's to improve response time by 15% through minimizing database roundtrips and aggregate functions
- Conducted rigid in-house quality assurance and wrote robust unit tests, ensuring code is sturdy before production
- Consolidated two AWS Lambda functions, reducing compute usage and optimizing database efficiency

UC Irvine - Undergraduate Researcher | Irvine, CA   Jul. 2023 - Sep. 2023
- Collaborated with Professor Chen Li on the Texera Project, a progressive cloud-based workflow platform universalizing data analytics, machine learning, and data science
- Leveraged Scala to amplify Texera's operator repertoire, pioneering the creation of diverse plotting and visualization operators essential for user data representation during deployment

JP Morgan Chase & Co - Data For Good | Plano, TX   Apr. 2022 - Apr. 2022
- Selected from over 800 applicants to partake in a hackathon aimed at aiding agricultural foreign investment
- Engineered machine learning models in Python, leveraging Pandas, NumPy, and Scikit-learn, to optimize agricultural foreign investment strategies while considering global climate impact
- Utilized data visualization libraries such as Matplotlib and Seaborn to generate insightful charts and graphs, facilitating trend analysis and decision-making processes to present findings and methodologies to senior data engineers

Tech4Good Laboratory - Web Developer (UI Components team) | Santa Cruz, CA   Sep. 2021 - Mar. 2022
- Spearheaded a 4-member team to develop responsive web pages, enhancing user experience by 11% through collaborative design updates in Figma
- Implemented responsive design using CSS flexbox to improve UI components, significantly enhancing user engagement and interaction

PROJECTS

Search Engine and Indexer - Python
- Designed and implemented a robust search engine in Python, leveraging information retrieval techniques such as term frequency-inverse document frequency (TF-IDF) scoring, document indexing, and ranking algorithms
- Employed web scraping and HTML parsing utilizing the BeautifulSoup library to extract structured data from web pages, ensuring accurate retrieval of relevant content for indexing
- Developed efficient data structures, including inverted indexes and document frequency calculations, to optimize search performance and enable fast retrieval of search results from a large-scale corpus

Stock Market Trend Predictor - Python, TensorFlow, Keras
- Engineered a stock price forecasting model utilizing LSTM networks to analyze and predict S&P 500 index movements, demonstrating deep learning and time-series forecasting proficiency
- Automated financial data acquisition from yfinance, implemented data preprocessing with MinMaxScaler for normalization, and structured dynamic training/testing datasets to optimize model accuracy and efficiency
- Enhanced model validation and user experience through performance analysis using RMSE and intuitive data visualizations with matplotlib

SurfSender - Python
- Created a Flask web application that extracts surf data from the web and generates weekly, optimized surf reports
- Developed an intelligent algorithm to curate forecasts of wave heights, ratings, and ideal surfing times for the week
- Implemented the project with the BeautifulSoup library to handle web scraping and data processing efficiently

SKILLS

- **Languages**: Python, C/C++, Java, PostgreSQL, HTML, CSS, React, Javascript/Typescript
- **Technologies**: AWS Suite, Unix, MacOS, Git, Figma, Notion, LucidCharts, GitKraken, Azure DevOps