Hong K. Nguyen

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EDUCATION

Evergreen Valley College

Expected Graduation May 2027

Associate's Computer Science

San Jose, CA

- Expected transfer to 4-year university: Fall 2027 (top choice: UC Berkeley)
- Related Coursework: Introduction to Java, Data Structure and Algorithms, Object-Oriented Programming, Foundations of Data Science, Discrete Structures, Structure and Interpretation of Computer Programs

TECHNICAL SKILLS

Languages: Java, SQL, Python

Frameworks & Libraries: Spring Boot, JUnit, NumPy, Scikit-learn Developer Tools: IntelliJ IDEA, Maven, Docker, GitHub, Git

Projects

Simple Bank App | Java, Java Swing, MySQL, JDBC

- Developed a full-stack Java desktop banking application implementing secure user authentication, and account management using Java Swing for the GUI and MySQL/JDBC for database operations.
- Architected a robust database system using MySQL to handle user accounts, transaction history, and balance management with features including deposits, withdrawals, and inter-account transfers
- Implemented a modular and maintainable codebase utilizing object-oriented programming principles with Java, featuring abstract classes for GUI components and dedicated database interaction layers.

Simple Weather App | Java, Java Swing, JSON.simple, REST APIs

- Developed a Java-based weather application with a user-friendly Swing GUI interface, implementing real-time weather data retrieval through RESTful API integration with Open-Meteo services.
- Engineered robust API communication systems using HttpURLConnection, incorporating JSON parsing for handling complex weather data structures, including temperature, humidity, wind speed, and weather conditions.
- Built data processing features with geolocation, time zone handling (LocalDateTime), and unit conversion, ensuring clean separation of GUI and backend.

Job Career Level Classification ML System | Python, Pandas, Scikit-learn, NumPy

- Developed a career-level classification model, achieving 77% accuracy using a Random Forest classifier with sophisticated text processing and feature engineering techniques.
- Implemented advanced data preprocessing pipeline incorporating TF-IDF vectorization, SMOTE oversampling, and Chi-squared feature selection to handle imbalanced job posting data.
- Optimized model performance through GridSearchCV hyperparameter tuning and engineered features from multiple data fields (job titles, descriptions, locations, functions, and industries).

EXPERIENCE

Java Programming Tutor (Part-time)

Aug 2025 – Present

Evergreen Valley College

San Jose, CA

- Tutored students in Java, OOP, and data structures, reinforcing core software engineering skills.
- Provided 3 hours of sessions on algorithms, debugging, and problem-solving, improving student performance.
- Reinforced software engineering principles to prepare students for the upcoming exam and advanced CS coursework.

Data Science Embedded Tutor (Part-time)

Jan 2025 – May 2025

Evergreen Valley College

San Jose, CA

- Guided students in Python and NumPy for data cleaning and transformation.
- Facilitated in-class activities as an embedded tutor, reinforcing visualization, inference, and analysis concepts.
- Assisted with debugging code, optimizing scripts, and understanding data science workflows.

Project Manager (Part-time)

Jan 2024 - May 2024

EVC Computer Science Club

San Jose, CA

- Led a robotics project using a Raspberry Pi G1 Tank, learning the fundamentals of robotics and assembly.
- Implemented obstacle detection and navigation features using pre-built components and features.