Hong Khai Nguyen

(669)-837-3398 | khainguyen2004@gmail.com | linkedin.com/in/khainguyen21 | github.com/khainguyen21

EDUCATION

Evergreen Valley College *Jan 2024 — Jun 2027*
Computer Science - Associate in Science for Transfer *GPA: 3.76*

SKILLS

Programming Languages: Java, SQL, Python (Data Analysis), HTML/CSS
Libraries & Frameworks: Spring Boot, JUnit, Numpy, Scikit-learn
Developer Tools: IntelliJ IDEA, Git, Github, Docker, Maven, Vim, Linux, PostgreSQL

PROJECTS

Learnr (CalHacks2025) | React (TypeScript), Node.js (JavaScript), Express.js, VAPI API, OpenAI GPT-4, ElevenLabs

- **Designed and developed** an AI-powered learning tutor using **TypeScript (React)** and **Node.js (JavaScript)**, integrating the **VAPI API** to deliver conversational lectures where students can interact, ask questions, mute, or end sessions at any time.
- **Collaborated** closely with a **team of four**, facilitating regular communication to align feature development, share technical insights, and ensure the AI tutor seamlessly fit into the broader project goals.
- **Led** feature integration and code reviews for the AI tutor, proactively gathering team feedback and fostering a collaborative environment that prioritized clear communication, shared understanding, and rapid iteration.

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 (OOP)** principles with **Java**, featuring abstract classes for GUI components and dedicated database interaction layers.

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

- **Developed** a career-level classification model that achieved **77% accuracy** by implementing a **Random Forest classifier** with advanced text preprocessing and feature engineering.
- **Implemented** an advanced data preprocessing pipeline incorporating **TF-IDF vectorization**, **SMOTE oversampling**, and **Chi-squared feature selection** to handle imbalanced job posting data.
- **Optimized** model performance—improving **F1 score by 15%**—by conducting **GridSearchCV hyperparameter tuning** and engineering features from job titles, descriptions, locations, functions, and industries.

EXPERIENCE

Java Programming Tutor (Part-time) *Sep 2025 — Present*
Evergreen Valley College *San Jose, CA*

- **Improved** student mastery of **Java, OOP, and data structures**, increasing **course pass rates by ~25%** and reducing **assignment errors by ~30%** through targeted one-on-one tutoring and hands-on coding exercises.
- **Delivered** a **3-hour workshop** on **algorithms, debugging, and problem-solving**, achieving a **20% increase in students' coding assessment scores** through hands-on exercises and targeted feedback.

Data Science Embedded Tutor (Part-time) *Feb 2025 — May 2025*
Evergreen Valley College *San Jose, CA*

- Provided hands-on tutoring in **Python/NumPy**, guiding students through data cleaning, statistical analysis, debugging, and introducing **machine learning workflows** such as regression and classification.
- Boosted student lab completion and code accuracy by **25%**, based on assessment scores and submission rates.

LEADERSHIP EXPERIENCE

Project Manager *Jan 2024 — May 2024*
Evergreen Valley College CS Club

- **Led** a 4-member team to deliver an **autonomous Raspberry Pi G1 tank**, achieving **~95% obstacle-avoidance accuracy** within **8 weeks** by coordinating **hardware integration** and **iterative navigation testing** using pre-built modules.