Khanh Van

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LinkedIn | GitHub | Website

SUMMARY

Experienced Software Developer with 4+ years of hands-on experience in Software Development, AI/ML, Algorithm Design, and DevOps. Strong foundation in building robust, scalable applications, developing AI/ML models, and optimizing complex systems. Experienced in building and maintaining CI/CD pipelines, automation, and cloud infrastructure. A problem-solver, perfectionist, and dedicated to crafting innovative solutions. Highly skilled in Java, C/C++, Python, JavaScript, and other key software development technologies.

TECHNICAL SKILLS

Programming Languages	:	Java | C/C++ | Python | JavaScript | PHP | Assembly | Racket | Prolog
Libraries / Frameworks	:	Spring Boot | Hibernate | Scikit-Learn | Flask | Django | React | NodeJS
Databases	:	PostgreSQL | MySQL | MongoDB
DevOps / Clouds	:	Docker | Kubernetes | Amazon Web Service (AWS)
Platforms / Tools	:	Unix/Linux | Git/GitHub

EDUCATIONS

B.S. in Computer Science *(August 2023 - (Expected) May 2025)*

The University of Texas at Dallas - Richardson, TX

GPA : 3.7

Relevant Courseworks : Advanced Algorithms | O.O.P. | Data Structures | Database Systems | Operating Systems | Machine Learning | Cloud Computing | Natural Language Processing

EXPERIENCES

QHung Management | Richardson, TX *(October 2024 - Current)*

Web Developer

- Designed and developed a responsive company website with a tenant portal, rent payment processing, and MLS IDX integration.
- Built and deployed on AWS using Java, Spring Boot, and PostgreSQL
- Streamlined tenant communication and data management processes, improving operational efficiency.
- Maintained and updated applications and lease records, ensuring data accuracy and compliance.

Computer Science Mentor Center (UTD) | Richardson, TX (*Jan 2024 - Current)*

Mentor / Tutor

- Tutor students in C++, Java, Data Structures, and Algorithms. Assisting with homework, projects, and exam preparation.
- Help students understand complex Discrete Mathematics and Computer Architectures.
- Provide personalized guidance to improve problem-solving skills, coding techniques, and theoretical understanding.

Royal Dutch Shell | Houston, TX *(July 2019 - August 2020)*

Retail IT Intern

- Contributed to the development of the "Arrived At The Station" feature in the "Shell US & Canada" app by integrating Google Maps API and geofencing technology, enabling real-time user notifications upon gas station arrival.
- Collaborated with the backend team to implement RESTful APIs for seamless communication between the mobile app and server-side systems.
- Performed functional testing and assisted in debugging using tools, reducing deployment delays by 12%

PERSONAL PROJECTS

CICD Pipeline for Capstone Project *(November, 2024)*

- Developed a CI/CD pipeline for seamless integration and deployment of microservices using Python, Docker, Kubernetes, Flask, and Nginx.
- Implemented microservice architecture to facilitate communication between applications, ensuring smooth and efficient updates and deployment.

U.S. Annual Foliage Prediction ML Model *(November, 2024)*

- Built an AI/ML model using Python and scikit-learn to predict fall foliage patterns across the U.S.
- Utilized historical foliage data and weather conditions to aid tourism planning, environmental research, and conservation efforts.

Ingredience *(September, 2024)*

- Developed a full-stack web app to track kitchen inventory, monitor expiration dates, and identify low stock items
- Generated shopping lists and recipes based on available ingredients
- Built with JavaScript, Node.js, React, and MongoDB to ensure smooth user interactions.

Maze Generation & Pathfinding Algorithms *(June, 2024)*

- Created a Java-based program to generate and solve mazes using a modified Dijkstra's algorithm
- Ensured optimal pathfinding with penalties for wall removal during maze solving.

Paris Travel Planner *(November, 2023)*

- Designed a Java-based travel planner using graph algorithms to optimize Paris itineraries based on user preferences
- Focused on travel time and attraction types for efficient route recommendations.

Huffman Coding *(October, 2022)*

- Implemented Huffman coding in Java for data compression and decompression
- Reduced file size while maintaining data integrity using priority queues to construct Huffman trees.

CERTIFICATIONS

Python for Data Science, AI & Development (IBM) | Coursera (*August, 2024)*

- Mastered Python, Pandas, NumPy, web scraping, and APIs using Jupyter Notebooks.

Hands-on Introduction to Linux Commands and Shell Scripting (IBM) | Coursera (*July, 2024)*

- Gained proficiency in Linux commands, file management, shell scripting, and system monitoring.

Introduction to Software Engineer (IBM) | Coursera (*June, 2024)*

- Covered SDLC, programming fundamentals, Git, software design principles, and testing methodologies.

Microsoft Office Specialist | Microsoft (*February, 2020)*

- Certified in Microsoft Word, Excel, Access, and Outlook for document management, data analysis, and productivity.

CAMPUS INVOLVEMENTS

Artificial Intelligence Research | Richardson, TX (*October 2024 - Current)*

Research Associate

- Conducting research on computational meme understanding by constructing AI model datasets
- Curating and annotating meme data to enhance machine learning models' ability to interpret cultural and contextual nuances
- Collaborating to develop methodologies for analyzing visual and textual elements in memes with applications in NLP and computer vision.