DANG "MICHAEL" NGUYEN

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EDUCATION

Texas Christian University

August 2021 - December 2025

GPA: 3.88

Bachelor's, Computer Science

PROFESSIONAL EXPERIENCE

Infolob Global Irving, TX, USA

Database Engineer Intern

May 2024 - August 2024

- Built and managed Oracle databases by applying SQL and Exadata knowledge, improving data migration efficiency by 30%.
- Enhanced Oracle Database functionalities by integrating Large Language Models (LLMs), enabling advanced vector search, which increased semantic information retrieval accuracy by 40%.
- Created a CRUD application for cloud database file management using Oracle APEX and D3.js for data visualization.
- Collaborated with the CTO and other interns, contributing to successful project outcomes through strong communication.

Sendo Technology Joint Stock Company

Ho Chi Minh City, Vietnam

June 2023 - August 2023

Data Engineer Intern

- Led data processing for over 10,000 user records using Python, Microsoft Excel, and Tableau, delivering insights that influenced company decisions and improved data-driven strategies by 25%.
- Guided team members in adopting the 'Great Expectations' framework, enhancing the consistency and reliability of data analyses across projects.
- Developed a backend microservice in Golang to automate user thumbnail creation, reducing manual image processing time by 50% and increasing team productivity.

PROJECTS

Senior Design Project

August 2024 - Present

- Built FWDX BioBlade, an automated genetic sequence analysis system, by applying Agile methodologies and client feedback, resulting in a 30% faster development cycle.
- Established vision and scope documents and maintained technical documentation to align team objectives with FDA compliance, enabling smooth onboarding and project continuity.
- Developed automated reporting tools using genetic data, which reduced manual processing time by 50%, increasing analysis efficiency for FWDX scientists.
- Led bi-weekly sprint planning with a team of six, implementing test cases and QA processes to enhance system reliability.

$\textbf{Hogwarts Artifacts API} \ \ \textbf{-} \ \underline{\textit{Link to project}}$

February 2024 - May 2024

- Developed a RESTful API using Spring Boot to manage wizards, artifacts, and user data, implementing complete CRUD operations within the Controller and Service layers.
- Developed unit tests for services and controllers with Mockito and Spring's MockBean to ensure robust functionality.
- Integrated Spring Security for user authentication and role-based authorization, and utilized Spring's RestTemplate to incorporate the OpenAI GPT-4 API for real-time API functionality summarizations.
- Deployed the application on Azure Cloud, including database setup and connection, and established staging and deployment environments to streamline the deployment process.

$\textbf{SuperFrog Scheduler} \ \ \textbf{-} \ \underline{\textit{Link to project}}$

March 2024 - May 2024

- Co-developed the SuperFrog Scheduler as part of a team, utilizing Git for effective version control and collaboration.
- Engineered the backend of the scheduling system using Spring Boot, facilitating robust and scalable server-side logic to manage complex user interactions and data processing requirements.
- Created a responsive and intuitive user interface using Vue.js and Vite, enhancing user engagement and operational efficiency for managing mascot appearances at Texas Christian University

SKILLS

Languages: SQL, Python, Linux/Unix, HTML/CSS, Java, JavaScript, Go Lang

Framework Libraries: Pandas, Java Spring, Vue.js, Express.js

Technologies: Tableau, Docker, Git, Oracle Apex, Microsoft Excel, Microsoft Powerpoint, Azure, Oracle Cloud, Mongo Atlas