**PHUC (WIILIAM) PHAM**

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Software engineer with experience in developing web and mobile applications, and a strong interest in machine learning and AI. I’m passionate about creating scalable products and contributing to dynamic, growth-oriented teams. Seeking an opportunity in a fintech product environment to apply my skills, continue learning, and grow professionally.

**TECHNICAL & PROFESSIONAL SKILLS**

* ***Programming languages*:** Python · JavaScript · TypeScript · Java
* ***Front-End & Full-Stack Development*:** React · NextJS · Node.js · Expo · FastAPI
* ***Databases & Data Storage*:** MongoDB · Neo4j · Milvus · PostgreSQL · MinIO
* ***Tools & Techs*:** Docker · Portainer · Git · Bash · PowerShell · Ollama · RAG · Tensorflow · PyTorch · Android Studio
* ***Soft skills*:** Time management, problem-solving, independence, teamwork, prompting and researching.

**EDUCATION**

**MASTER OF MACHINE LEARNING, THE UNIVERSITY OF ADELAIDE**

**Tree Height Estimation Project –** Researching and developing an accurate method for estimating the height and classifying species of trees using computer vision through street-view images.

**BACHELOR OF INFORMATION TECHNOLOGY, WELLINGTON INSTITUTE OF TECHNOLOGY (WELTEC)**

**Patrick Pop Memorial Shield –** Top third-year industrial IT project award.

**EXPERIENCES**

**DECEMBER 2023 – CURRENT**

**SOFTWARE DEVELOPER, THE UNIVERSITY OF ADELAIDE, THE CENTRE FOR RESEARCH ON ENGINEERING SOFTWARE TECHNOLOGIES | AUSTRALIA**

**Achievements:**

* Delivered cross-platform applications to improve user experience and accessibility across multiple operating systems.
* Enhanced system efficiency by integrating advanced technologies — including foundational models and LLM agents — to automate more complex tasks.

**Responsibilities:**

* Researched and analysed system performance bottlenecks and technical constraints, then recommended enhancements that improved stability and scalability.
* Designed, developed, tested, and deployed applications across Linux, Windows, and Android platforms, utilising React, React Native, Python, JavaScript, and TypeScript.
* Delivered high-quality, maintainable code aligned with technical specifications and best practices and maintained comprehensive documentation across the software development lifecycle.
* Built and optimised retrieval-augmented generation (RAG) systems by integrating vector and graph databases, enhancing semantic search and data retrieval latency.
* Integrated machine-learning and automation tools, including foundational models (Ollama, Gemini, Llama, HuggingFace), to streamline software workflows and boost efficiency.
* Gathered, analysed, and leveraged operational metrics to drive continuous improvement, monitor reliability, and support data-driven decision making.
* Mentored and guided students in software development and system analysis projects, fostering technological innovation and practical skill development.

**SEPTEMBER 2022 – DECEMBER 2022**

**IT RESEARCHER - ECLIPSE CS PTY LTD | AUSTRALIA**

**Achievements:**

* Proposed a new automated solution for longstanding issues in construction and engineering—specifically aimed at automating floor-plan estimation and reading.
* Developed a computer-vision and machine-learning function to detect and estimate features from 2D floor plans, reducing manual object-identification effort.

**Responsibilities:**

* Conducted research and developed computer-vision and machine-learning algorithms (Python, PyTorch) for floor-plan estimation.
* Collaborated with construction-domain experts and development teams to design, implement, and test software solutions.
* Analysed model performance and project results, refined algorithms accordingly, and presented findings to support further integration and continuous improvement.

**MARCH 2019 – SEPTEMBER 2020**

**APPLICATION DEVELOPER - ANZ NEW ZEALAND | NEW ZEALAND**

**Achievements:**

* Recognised with the Kau Mau Te Wehi Award (2019) for enhancing the annual disaster-recovery exercise; accelerated exercise completion by approximately 10% compared to the prior year.
* Restructured a core MS SQL Server database schema to support migration processes to improving data-access efficiency and reliability for the recovery activity.

**Responsibilities:**

* Developed the Java/Spring Boot Disaster-Recovery application along with microservices for new annual disaster recovery activities management utilising JavaScript, OpenShift, Docker, MS SQL to modernise the workflow replacing manual Excel Sheet tracking.
* Analysed business requirements, researched technical solutions, designed and developed applications, and maintained documentation consistent with the full software development lifecycle (SDLC).
* Produce both technical and user-facing guides and manuals to support adoption by technical and non-technical stakeholders.
* Evaluated and recommended resolution strategies to align with business objectives and ensure operational continuity.
* Collaborated with cross-functional teams during change-management processes, and performed database operations including backups, restores, script development, configuration builds and data migration using MS SQL Server.

**EXTRACURRICULAR ACTIVITIES/ CERTIFICATE**

**JULY 2023 - SEPTEMBER 2023**

**RESEARCH FELLOW OF RAYO | VIETNAM**

* Participated in a tech-enthusiast team developing an AI-powered browser extension to enhance website accessibility for people with visual impairments.
* Studied internet usage and browsing behaviour among users with disabilities and contributed to product brainstorming and early prototype feedback.

**FEBRUARY 2023**

**ACCREDITATION CERTIFICATION OF MENTAL HEALTH FIRST AIDER | AUSTRALIA**

* Completed accreditation in mental-health first-aid to support wellbeing of peers and colleagues in the workplace and community.

**JULY 2022 – DECEMBER 2022**

**AI & ML STUDENT CLUB COMMITTEE|** **THE UNIVERSITY OF ADELAIDE, AUSTRALIA**

**OCTOBER 2020 – DECEMBER 2020**

**BUSINESS ANALYST OF X1 STARTUP PROJECT | VIETNAM**

* Worked in the top 10 % of projects selected in the “Start-up Wheel 2020” competition for innovative solutions.
* Researched and helped define a unified payment system for public-services, transportation, parking, university services and F&B—supporting early business-analysis and product scoping.

**OCTOBER 2019**

**DAFFODIL DAY FUNDRAISING VOLUNTEER | ANZ, NEW ZEALAND**

* Participated as part of a team that raised NZ$11,000 for cancer-support services, exceeding the internal target by approximately 30 %.
* Collaborated with colleagues across branches to organise collection activities, promote awareness and support the annual appeal for the Daffodil Day fundraising campaign.

**REFERENCES**

**Available as request**