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Work Permit: B

Profile Summary

Results-driven Software Developer with **5+ years of experience** in system architecture, data management, and full-lifecycle software development. Proven ability to design, build, and maintain mission-critical applications by applying strong **Object-Oriented Programming (OOP) principles** and deep data expertise. Highly proficient in **Python** and **TypeScript/JavaScript**, alongside practical experience in **C# (.NET)**, demonstrating rapid adaptability to new language environments. Adept at leveraging modern engineering practices, including **DevOps/CI/CD (Docker, GitHub Actions)**, advanced **SQL/PostgreSQL** for optimized data models, and a **proactive, solution-oriented approach** vital for complex data integration and development in fast-paced Agile environments.

Key Skills

- **Programming & Frameworks:** Python (Pandas, NumPy, Scikit-Learn, PySpark, Jupyter), C#, .NET, TypeScript/JavaScript, React, Next.js, Tailwind CSS, HTML/CSS.
- **Backend & Databases:** REST APIs, Object-Oriented Design, Design Patterns, PostgreSQL, database design, code optimization, and refactoring.
- **Cloud & DevOps:** AWS (EC2, S3), familiarity with Azure (ADLS, Key Vault), Docker, Git (GitHub, Bitbucket), Kubernetes, CI/CD practices, branching strategies, and peer code reviews.
- **Data Engineering & Scientific Computing:** Data pipelines, ETL automation, SQL, HPC optimization, complex data analysis, and large-scale computational modeling (transferable to Snowflake).
- **Collaboration & Methodologies:** Agile, Jira, Confluence, effective stakeholder communication, and distributed team collaboration.
- **Problem-Solving & Analysis:** Strong debugging, analytical thinking, and time management skills.
- **Soft skills:** Fluent English, French A2/B1, Technical Documentation, Code Review, Proactive Problem Solving, Stakeholder Collaboration

Experience

Full-stack Developer, Chevalet.co

Jul 2025 - Present

- Delivered custom full-stack web applications using **React, Next.js, and TypeScript**, ensuring a modern, intuitive, and performant user experience (UI/UX) for the platform.
- Designed and implemented highly **optimized PostgreSQL database schemas** and advanced **SQL queries** to manage large-scale data efficiently, directly relevant to financial data modeling.
- Automated **CI/CD pipelines** using GitHub, streamlining deployment procedures and demonstrating proficiency with software lifecycle tools, aligning with the need to improve build/release processes.
- Collaborated closely with product management to define requirements and translate user needs into technical specifications and application designs.

Software Developer, Tandm.ai

Oct 2023 - Aug 2025

- Played a key role in software design and system architecture by developing and refactoring core **Python backend services**, applying robust **OOP principles** and modern design patterns for a highly scalable API layer.

- Applied **DevOps practices** by managing the deployment of **Dockerized applications** and contributing to reliable CI/CD pipelines, demonstrating experience in system management and containerization (relevant to Kubernetes/cloud readiness).
- Achieved a **50% improvement** in backend system performance through deep code optimization and algorithm tuning, ensuring high performance of a complex data platform.
- Actively participated in mandatory **peer code review sessions** (Git), maintaining exceptional code quality and providing constructive feedback, aligning with the team's commitment to quality assurance.
- Worked within the **Agile/Scrum framework**, actively collaborating across teams and documenting designs, ensuring clear communication and priority management in a fast-paced environment.

Various Technical Personal Projects

Dec 2023 - Present

Fake News Detection Machine Learning Model using PySpark and Python

- Built a **full ETL data pipeline** using **PySpark, Pandas, and NumPy** to support scalable processing and feature engineering for text data.
- Built a **Gradient Boosted Tree Classifier** to identify fake news, demonstrating proficiency in robust machine learning model implementation.

Market Value Prediction of Football Players Machine Learning Model using Scikit-Learn and Python

- Developed a **Random Forest Regression model** using **Scikit-Learn** to estimate English Premier League player values based on statistical features.
- **Engineered domain-specific features** and rigorously evaluated models using Pandas and NumPy, showcasing a product-minded approach to model design and validation.

PhD Candidate & Researcher, University of Queensland

Apr 2019 – Dec 2023

- Developed **advanced software solutions (3D visualisation) and automated scientific workflows**, acting as an independent software engineer within an interdisciplinary research team.
- Designed and implemented **Python-based tools and ETL data pipelines** to automate complex computational analysis and workflows, highly analogous to developing data parsers for custodian bank files.
- Optimized High-Performance Computing (HPC) simulations, **cutting runtime by 30%** through parallelization and performance tuning, showcasing deep performance analysis skills (algorithms and data structures).
- Gained practical insight into managing engineering design data and requirements through exposure to CAD tools (Autodesk Fusion, PTC Creo).
- Published seven peer-reviewed journal articles, demonstrating strong technical documentation and written communication skills in English.

Internship

Consultant, 180 Degrees Consulting

Feb 2021 – Jun 2021

- Conducted market research on industry trends and competitors to develop actionable client strategies, collaborating with a team of six to deliver solutions on time and to a high standard.

Education

University of Queensland

Brisbane, QLD

Doctor of Philosophy, Mechanical Engineering

Dec 2023

- Title: *In vitro evaluation of porous PHBV-based scaffolds for bone regeneration application*

Bachelor of Engineering, Extended Major in Mechanical Engineering

Jul 2018

- Awarded VIPAC Advanced Dynamics & Vibrations Prize 2016

Languages

- English: Native/Fluent
- French: Between A2-B1 (Actively learning)