

Vincent Jack Renders

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- Assiduous, practical and curious.
- Prize-winning aerospace engineering and computer science graduate.
- Bilingual in French and English.

CERTIFICATIONS

2023 Microsoft Azure Fundamentals
2022 AWS Cloud Practitioner

ACHIEVEMENTS

2022 Accenture UK *Rising Star* Award - one of 3 winners.
2020 University *Programme Director Award* Prize.
2016 Led a successful, 3-week expedition to Costa Rica.
2014 Elected Captain of the CVMS Rowing Club.
2011 Built first computer.

EDUCATION

UNIVERSITY OF BATH MSc. COMPUTER SCIENCE

Oct. 2020 - Sep. 2021
High Merit Degree Classification.

LOUGHBOROUGH UNIVERSITY BEng. AERONAUTICAL ENGINEERING

Sep. 2016 - Jul. 2020
Second Class Honours, Upper Division
Winner of the *Programme Director Award* for the final year project and 'outstanding overall achievement in their final year.'

THE CARDINAL VAUGHAN MEMORIAL SCHOOL (CVMS)

A-LEVELS
2014 - 2016
Mathematics (B) • Physics (B) • French (A)
GCSEs
2009 - 2014
6 × A* Mathematics, Physics, IT, DT, Biology, and French.
6 × A Further Maths, Chemistry, History, and English (Lang. & Lit.)

INTERESTS

HOBBIES

3D Printing • Arduino/Raspberry Pi Projects • Open-source contributions

SPORTS

Cycling • Paddleboarding • Rowing
Skiing • Swimming • Rugby • NFL

Transcripts and referees, from both academic and professional backgrounds, are available upon request.

EXPERIENCE

ACCENTURE (UK) LTD. | APPLICATION DEVELOPMENT ANALYST

Feb. 2022 - Present | London, England

- **Backend Developer and Platform Engineer** responsible for building a new, event-driven, microservice based architecture for a video metadata ingestion and transformation platform, replacing a legacy monolith.
- Leveraged AWS technologies, including **SQS, ECS, Lambda, MemoryDB**, and **CDK/CloudFormation** to enhance scalability of a core service to meet current and future streaming demands and live event loads on a multi-platform video-on-demand and live event streaming application.
- Volunteered to **coach and mentor** a junior member of the team, nurturing their software engineering expertise and understanding, leading to enhanced motivation as well as their subsequent promotion, before being **chosen to lead full stack software engineering training** for ten new graduates.
- Identified and independently developed a **cost-saving program** to reduce the up-time of the MemoryDB/Redis clusters by 52% saving the client over **\$40,000 per year** in development costs.

TECHNOLOGIES

Java • Spring Boot/Cloud • AWS • Redis • Docker • Jenkins • Linux • Bash

STEALTH STARTUP | FULL STACK SOFTWARE ENGINEER

Oct. 2021 - Feb. 2022 | Cambridge, England

- Produced a **cloud native** web application as an MVP for a nascent business.
- Leveraged Azure technologies, including **App Service, Functions, SQL Server**, and **Azure DevOps** to achieve high velocity as well as optimal scalability and availability within strict budget requirements.
- Implemented automated tooling to assist in development workflow, such as **Renovate** for dependency updates and **Azure DevOps** for CI/CD pipelines.

TECHNOLOGIES

.NET • C# • Razor • Azure • SQL • Entity Framework • Identity Server

ACADEMIC PROJECTS

MASTERS RESEARCH PROJECT

Jan. 2021 - Sep. 2021 | Bath, England

- Implemented the AKS polynomial-time primality test in C++ to explore possible applications of this algorithm in **security and cryptography**.
- Deployed it to a **GPU cloud** and used shell scripts to automate experiments, investigating ways of improving run time performance by executing it in **parallel**.

TECHNOLOGIES

C/C++ • Linux/Unix • GPU Cloud • Parallel Computing • Algorithms • \LaTeX

PRIZE WINNING UNDERGRADUATE FINAL YEAR PROJECT

Dec. 2019 - Jun. 2020 | Loughborough, England

- First-class final year individual project combining **dynamic modelling & control system design** with **multi-sensor data fusion** to develop a self-driving bicycle.
- Validated the controller and achieved balance stability by analysing, testing and refining dynamic models and PID control gains for actuated bicycle steering.
- Designed and **fabricated a bespoke electronic device** using open source inertial sensors and microcontrollers to measure the attitude of the bicycle.
- Applied a **Kalman filter** algorithm to estimate the bicycle roll angle, accurate to ± 2.17 degrees, from noisy sensor data for state feedback to the PID controller.

TECHNOLOGIES

MATLAB • Simulink • C • Arduino • Circuit Design • MEMS sensors • \LaTeX