Ng Hong Ray

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WORK EXPERIENCE

[Intern] Rohde & Schwarz Pte Ltd, Full stack Engineer — May 24 – Aug 24

- Developed a full-stack dashboard to monitor and track the status, progress, and activity of the company's legacy software to improve company's efficiency in testing procedure for mobile testing.
- Designed and implemented a microservices architecture using .NET frameworks to enhance system scalability and performance.
- Utilised C#, gRPC, React.js, and TypeScript to build robust backend and frontend solutions.
- Advised on software architecture improvements to supervisors to optimise system performance and maintainability.
- Provided guidance on coding standards and best practices to enhance code quality, maintainability, and efficiency.

[Intern] Rohde & Schwarz Pte Ltd, Backend Engineer — Dec 22 – Jan 23

- Developed Python scripts to automate file format conversion based on company specifications to improve operational efficiency.
- Optimised and streamlined the file processing workflow to reduce manual effort and processing time.
- Conducted testing and validation to ensure accuracy and compliance with company's standards.

[Intern] Ayzersense Technology Pte Ltd, Software Engineer — Sep 18 – Feb 19

- Developed an imaging software using C# in Visual Studio to detect and visualize mattress pressure in real-time.
- Implemented basic C++ microprocessor coding to enhance pressure detection accuracy for better visuals.
- Assisted in hardware development, collaborating with a mechanical engineer to integrate software with sensor technology to improve hardware efficiency.
- Contributed to product brainstorming, research, and design as part of the startup's development process.

PROJECTS

Impact Experience Project, NUS College — Jan 23 – Jan 2025

- Assisted Sungift Pte Ltd to increase local demand for local produce.
- Conducted market research with multiple business partners to improve local farming market knowledge.
- Organised 4 farm-to-fork events with Sungift and ActivehealthSG to increase demand for local produce.

NUS Tik Tok Orbital 2023, NUS & TikTok — May 23 – Aug 2023

- Developed an API Gateway that accepts HTTP request encoded in JSON formats for the project.
- Utilised CloudWeGo frameworks and developed the system in GO.
- https://github.com/HongRay/api-gateway

Sun Hacks 2024 – Arizona State University — Sep 24 – Sep 24

- Annual Hackathon at Arizona State University
- Won Best Rookie Hack Award
- Project tracks room occupancy using Machine Learning in real-time and relays the data to a dashboard, ensuring compliance with capacity regulations and improving efficiency.

EDUCATION

National University of Singapore (NUS) — Aug 22 – May 26

- Bachelor of Computer Science
- NUS College (Honours College)
- Singapore-Industry Scholarship

Ngee Ann Polytechnic — April 15 – April 19

- Diploma with merit in Biomedical Engineering and minor in Business Management
- Xilinx Asia Pacific Prize for The Most Outstanding Academic Performance
- Ngee Ann Scholarship Award
- Merit Award (Diploma in Biomedical Eingeering)