MOHAMMED ZUHAIR HUSSAIN

Software Engineer

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SUMMARY

Passionate and driven software engineer with a strong foundation in full-stack development and a 3.91 GPA in Information Technology at Nanyang Polytechnic. With a background in leadership and startup development, I am deeply interested in how technology can solve real-world problems. I enjoy building scalable web applications and exploring the use of AI to enhance user experiences.

TECHNICAL SKILLS

Frontend Development: React.js | Next.js | JavaScript/TypeScript | HTML/CSS | TailwindCSS | Bootstrap | Daisy UI | ShadCN

Backend Development: Node.js (Express.js, Hono.js) | .NET | Python (Flask) | RESTful APIs

Databases: PostgreSQL | MySQL | SQLite | Prisma ORM

Cloud & DevOps: AWS | Vercel | Git | GitHub

Programming Languages: JavaScript/TypeScript | Python | C# | R | SQL

Other Tools: Tableau | Microsoft Excel | Figma | Linux | Stripe

SOFT SKILLS

- Critical Thinking
- Problem Solving
- Teamwork
- Adaptability
- Collaboration
- Empathy

EDUCATION

DIPLOMA IN INFORMATION TECHNOLOGY | Nanyang Polytechnic | GPA: 3.91

2024 - 2027

- Honors:
 - o Director's List AY2024/2025 Semester 1 & 2
 - o Recipient of NYP Scholarship (O Level Pathway)
- Relevant Coursework: Data Structures & Algorithms, Web Application Development, Software Engineering Practices, Database Management Systems, Information Security, Network Technology

GCSE O LEVEL | Temasek Secondary School

2020 - 2023

- Honors:
 - o Vice-President of Young Ambassadors (Student Leadership Group)
 - o Vice-Captain of School Softball Team placing Top 6 in National School Games B Division

EXPERIENCE

FULL STACK DEVELOPER | Initiate Pte Ltd | Singapore | Initiate

April 2025 – present

- Joined as part of the founding development team, contributing to the design of the startup's product from the ground up.
- Integrated Stripe to enable automated payouts and secure customer billing, handling over \$100,000 in transactions during testing
- Engineered threaded post and topic filtering features, improving user engagement by 30%.

PROJECTS

POLYGURU | Student Productivity Platform | Polyguru

2024 - present

- Tech Stack: Next.js, TailwindCSS (DaisyUI), Prisma ORM.
- Built full-stack features including GPA Calculator and Al tools for test paper generation.
- Developed a collaborative Q&A social feed for resource sharing and peer support among students.

ECO PRIMERS | Sustainability Web Application | Eco Primers

- Tech Stack: Flask, SQLite, JavaScript, Bootstrap
- Developed authentication, donation, and event management systems (admin + user side).
- Integrated Stripe, OpenWeather, and Google OAuth for seamless user experience

POKEMON POCKET | Pokemon Game Application

2025 – present

- Tech Stack: C#, Spectre.Console
- Developed an interactive console Pokemon game with features like catching, battling, trading, quests and collecting card packs
- Utilized Spectre. Console to enhance UI/UX with styled text, menus and animations

EXTRA CURRICULARS

HEAD OF OPERATIONS | NYP Swift Student Interest Club

2024 - present

- Manage the planning and execution of club activities to ensure smooth coordination and strong engagement among members.
- Collaborated with Apple Singapore to conduct workshops and events for over 50 students

OPERATIONS ASSOCIATE | NYP Techopreneurship Club

2025 – present

• Contribute to the execution of events by assisting with operations and team coordination ensuring executions of tasks are timely

VICE-PRESIDENT | Young Ambassadors

2022 - 2023

- Helped organize and emcee school and community events focused on national identity, and cultural awareness.
- Collaborated with teachers and external partners to plan outreach initiatives and ceremonies.

VICE-CAPTAIN | Softball Team

2022 - 2023

- Helped lead the team to a **Top 6 national placement** in the National School Games B Division Championship.
- Coordinated team logistics and trainings alongside coaching staff.

FINALIST | Singapore Science & Engineering Fair

2023

- Selected as one of the top student research projects in Singapore.
- Presented a study on alternative environmentally-friendly solutions to cleaning up oil spills

CERTIFICATIONS

AWS CERTIFIED CLOUD PRACTITIONER | Amazon Web Services (AWS)
GOOGLE CYBERSECURITY SPECIALIST | Coursera
GOOGLE DATA ANALYTICS SPECIALIST | Coursera

Issued 2025 April Issued 2025 March Issued 2024 August

HOBBIES AND INTERESTS

SPORTS

• Vice-Captain of school softball team; also played basketball and football in primary school, and currently part of the hockey team **PHOTOGRAPHY**

• Enjoy capturing everyday moments through images

CODING CHALLENGES

• Participate in Advent of Code for algorithm practice through fun and creative challenges

VOLUNTEERING

Passionate about community service, actively volunteering at my neighborhood's Residents' Committee to support local events.

REFERENCES

DR BRANDON OOI | Lecturer, Nanyang Polytechnic | (+65) 6550 1634 | brandon_ooi@nyp.edu.sg **DR BRANDON OOI** | Lecturer, Nanyang Polytechnic | (+65) 6550 1634 | brandon_ooi@nyp.edu.sg **DR BRANDON OOI** | Lecturer, Nanyang Polytechnic | (+65) 6550 1634 | brandon_ooi@nyp.edu.sg