

EDUCATION

Nanyang Technological University, Singapore
Bachelor of Engineering (Computer Science)

Aug 2020 – May 2024

- Relevant courses: Advanced Software Engineering, Net Centric Computing, Introduction to Data Science and AI, OS.

WORK EXPERIENCE

Temasek Laboratories@NTU
Full Stack Developer Intern

Jan 2023 – Present

- Worked on MERN stack application which uses NLP services with Ubuntu 20.04.
- Refactored code to reduce hard-coding and make deployment easier.
- Tested backend on Azure Virtual Machine.

VFlowTech Pte. Ltd.
IoT Intern

May 2022 – Aug 2022

- Reviewed 3rd party IoT platform and coordinated with developers to debug issues to improve user experience.
- Programmed firmware on Raspberry PI/Advantech using C++ with Modbus TCP/IP and HTTP/MQTT protocols.
- Evaluated and tested AWS, Google Cloud, Azure and Digital Ocean services for IoT platform development.
- Spearheaded IoT Development team for creating a new platform using MERN stack.
- Programmed cloud servers using AWS EC2 and Digital Ocean Droplet.
- Engineered configuration of DNS and NGINX web servers along with TLS encryption.
- Studied IoT data to design predictive alerts for implementation of machine learning algorithms.

Mentogram
Business Analyst Intern

May 2021 – Aug 2021

- Examined coaching market to devise new strategy for growth and sales.
- Designed value proposition canvas and sales pitch by identifying pain points, goals and solutions to problems faced by coaching industry.

ACADEMIC PROJECTS

CZ3004 – Multidisciplinary Project ([video presentation](#))

Aug 2022 – Nov 2022

- Led a team to create a self-navigating robot in a known environment controlled with an Android device.
- Developed an Android application for controlling the robot via Bluetooth.
- Achieved rank 1 competing against 47 teams in first task.

CZ3002 – PreSchool GoWhere

Aug 2022 – Nov 2022

- Developed a web application to help parents find preschools based on various criteria like distance, 2nd languages offered, meal preferences, transport facility, etc.
- Used PostgreSQL, Express, React, Node.js (PERN stack).
- Hosted on Firebase and Render.

CZ2006 – MyBikeSG, NTU ([mybikesg-86ea4.web.app](#))

Feb 2022 – Apr 2022

- Pioneered a web application to help cyclists find Bike Racks, Flat Routes, and Repair Shops close to current location or destination.
- Created using MongoDB, Express, React, and Node.js (MERN stack).
- Hosted application on Firebase and Heroku.

CZ2002 - Restaurant Reservation System, NTU

Oct 2021 – Nov 2021

- Developed a restaurant point of sale system as a command line application in Java.
- Utilized object-oriented programming concepts to build a flexible application.
- Modelled a reservation system using UML class and sequence diagrams.

CE1115 - Introduction to Data Science and Artificial Intelligence, NTU

Jan 2021 – Mar 2021

- Analysed the Brazilian e-commerce public dataset by Olist on Kaggle.
- Predicted review score of each category of product using numPy, pandas, seaborn & matplotlib.
- Trained regression models (linear, random forest) and classification models (logistic, random forest).

PERSONAL PROJECTS

Portfolio Website (<https://xitij27.github.io>)

Dec 2022

- Developed using HTML, CSS and JavaScript.

CERTIFICATIONS

JPMorgan Chase & Co.

Jun 2022 – Jul 2022

- Completed 'Software Engineering Virtual Experience' program.

Texas A&M University, Qatar

Jun 2020 – Jul 2020

- Completed 'Creative Fusion – Introduction to 3D Modelling' program using Fusion 360.

CO-CURRICULAR ACTIVITIES

Students' Computer Science and Engineering Club, Nanyang Technological University

Academics Executive

Oct 2022 – Present

- Organised '*Techterview 101*' event for helping students crack technical interviews.
- Delegated the correction of previous year paper solutions.
- Collaborated with the Office of Student and Alumni Affairs to organise the '*Peer Tutoring Programme*'.

V-Work Asia-Ready Exposure Programme, Cognizant x National Youth Council

July 2022

- Presented on the role of 'Data and AI in Pandemic Management' with a team from ASEAN, India and China.
- Ranked amongst the top 4 teams and awarded with "The Best Challenge Statement Project Presentation".

Mission X Programme, Youth Corps Singapore

May 2022

- Participated in workshops on planning impactful community service projects and effective volunteer management.

CANdroid Residential Education Programme, Hall 3

Feb 2022 – Mar 2023

Student Assistant

- Conducted sessions and assisted participants in developing mobile applications using Android Studio.

SKILLS

Programming Languages: C/C++, Python, Java, SQL, HTML/CSS, JavaScript (React, Node.js), Android development.

Cloud: Azure, AWS, Google Cloud, Digital Ocean.

Data Science & Analytics: Python (numPy, pandas, seaborn, matplotlib), PowerBI

Databases: NoSQL (*MongoDB, CosmosDB, DynamoDB*), SQL (*Postgres, mysql*).

Project Management: Github, Tortoise SVN, Trello.

IDEs & Editors: Eclipse, VSCode, Netbeans, Jupyter, Android Studio.

3D Modelling: Fusion 360

Languages: English (Proficient) and Hindi (Native).