

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 with Ubuntu 20.04.
- Refactored code to reduce hard-coding and make deployment easier.
- Tested frontend and backend deployments on Azure Virtual Machine.
- Wrote python scripts to process ASR (Automatic Speech Recognition) output.

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).

Railway Reservation System, DPS-MIS

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 (xitij27.github.io)

Dec 2022

- Developed using HTML, CSS and JavaScript.

ACHIEVEMENTS & CERTIFICATIONS

V-Work Asia-Ready Exposure Programme, Cognizant x National Youth Council	July 2022
<ul style="list-style-type: none">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".	
JPMorgan Chase & Co.	Jun 2022 – Jul 2022
<ul style="list-style-type: none">Completed 'Software Engineering Virtual Experience' program.	
Texas A&M University, Qatar	Jun 2020 – Jul 2020
<ul style="list-style-type: none">Completed 'Creative Fusion – Introduction to 3D Modelling' program using Fusion 360.	

CO-CURRICULAR ACTIVITIES

Students' Computer Science and Engineering Club, Nanyang Technological University	Oct 2022 – Present
Academics Executive	
<ul style="list-style-type: none">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'.	
Institution of Engineers, Singapore – NTU Student Chapter	Oct 2022 – Present
Infotech Project Manager	
<ul style="list-style-type: none">Designed and led the development of website for the club.Collaborated with IEEE-NTU to organize the 'Codewars' event, attracting over 100 students to learn basics of coding.	
Mission X Programme, Youth Corps Singapore	May 2022
<ul style="list-style-type: none">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	
<ul style="list-style-type: none">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).