

**Ng Jin Yang**  
HP: +65 90064029 | Email: [jinyang123@live.com.sg](mailto:jinyang123@live.com.sg)  
[LinkedIn](#) | [Personal Website](#)

## EDUCATION

---

**Nanyang Technological University, Singapore** **Aug 2020 – Dec 2023**

- **Bachelor of Engineering (Computer Science) with Second Major in Business**
- Specialization: Artificial Intelligence, Cyber Security
- Relevant Modules: Data Structure & Algorithms, Advanced Software Engineering, Applied Cryptography, Cyber Physical System Security, Cyber Threat Intelligence, Computer Security.

## ACADEMIC PROJECTS

---

**Nanyang Technological University, Singapore**

**Final Year Project – Create Your Own Project**

**Jan 2023 – Nov 2023**

**Title: Qualitative Analysis on Students' Online Lecture Notes**

- Build a website application to provide a collaborative learning platform by offering them a digital space where they can upload, access, and explore a diverse range of educational materials.
- Implemented the application with MongoDB, Express.js, and Node.js (MEN) Stack.
- Employed advanced data analytical tools, such as Natural Language Processing (NLP) to evaluate the quality and relevance of the uploaded documents with document quality metrics, and readability scores.
- Conducted qualitative analysis on a sample of courses from various specialisations, and effectively gathered insights on the various metrics on the lecture notes.

**AR Game Project – Tree Society**

**Apr 2023**

**Title: AR Productivity Application**

- Design an AR Game by creating beautiful assets in the Unity asset store and Blender for users to plant various tree designs that follow the Panorama Timer.
- Implement user interactions with other users using Photon Multiplayer and C# to create our features to motivate users to be productive.

**Cyber-Physical Systems Security Project**

**Mar 2023 – Apr 2023**

**Title: Correlation Power Analysis (CPA)**

- Implemented CPA to extract secret information from a cryptographic device by analyzing the power traces and calculating their hamming weight.
- Effectively plot the correlation of all possible key bytes to recover the complete 32-byte key on the Advanced Encrypted System (AES) and recover the initialization vector using Python

**VR Game Project – Dino Rush**

**Feb 2023**

**Title: Obstacle Course**

- Design a VR Game by importing an Obstacle Course Asset package from the Unity asset store; Create other 3D assets using Blender.
- Implement the movements, behavior, and user interface using C# to create various difficulties and experiences at each obstacle course level.

**Cyber Threat Intelligence Project**

**Sep 2022 – Oct 2022**

**Title: Ransomware Research**

- Browsed and familiarize with the dark web to extract primary data on Ransomware. Identifying the distribution in Victim Industry and Geography, the reasons and ransomware associated to past attacks.
- Implemented Selenium to scrape the data while using a virtual machine paired with the TOR browser, by analysing the HTML code to find the correct elements despite the challenges of browsing the dark web

**Advanced Software Engineering Project**

**Aug 2022 – Oct 2022**

**Title: ElderCare Website Application**

- Designed a website application to provide a one-stop online platform to provide the elderly with healthcare services using MongoDB, Express.js, React.js, and Node.js (MERN) Stack.
- Cultivate the whole Software Development Life Cycle – Project Proposal, Quality Plan, SRS, Project Plan, various management, and test plan documentation.
- Designed visual diagrams using visual paradigm; Designed prototype images and doctor dashboard using Figma and Tableau respectively.

## **WORK EXPERIENCE**

---

**Synapxe Pte. Ltd., Singapore**

**Feb 2024 – Current**

**System Analyst**

- Collaborate with business stakeholders to identify and analyze business needs.
- Part of National NGEMR project as an inpatient system analyst.
- Conduct requirement gathering, development, testing, identification & resolving of issues including incident tickets and/or change request, change control support.
- Facilitate change management by coordinating end-user for system implementations.

**Shopee Pte. Ltd., Singapore**

**May 2023 – Nov 2023**

**Data Analyst Intern**

- Efficiently extract data for end-users from several large and complex data warehouses by utilizing SQL
- Automated data collection and aggregation processes to build reporting dashboards on Data Studio
- Optimized billing and operation processes by automating them using Python and relevant libraries such as Pandas, xlsxwriter, os, googleapiclient, etc., effectively reducing process time and workload

**Undercurrent Capital Pte. Ltd., Singapore**

**May 2022 – Jul 2022**

**Software Developer Intern**

- Build and test decentralized applications for users to interact using Docker.
- Deployed non-fungible tokens and Algorand currency to smart contracts using Python and JavaScript.
- Successfully completed courses that include developing Accounts/Wallets, Assets/Transactions, Algorand Virtual Machines, and Algorand Smart Contracts.

**Ichisa Engineering Pte. Ltd., Singapore**

**Jan 2020 – Jul 2020, Dec 2020, May 2021 – Jul 2021**

**Sales & Operations Assistant**

- Organized and finalized the company's stock list using Microsoft Excel.
- Boosted publicity by managing operations on social media such as Facebook and Instagram.
- Update and list new products on the company's website, Eezee Buy, and ShipParts.
- Volunteered for annual food distribution to the elderly and less fortunate.

## **LEADERSHIP & CO-CURRICULAR ACTIVITIES**

---

**SCSE Nanyang Technological University**

**Jul 2021 – Aug 2021**

**Orientation Group Leader**

- Led a team of 18 members to foster bonds and forge new friendships.
- Conducted online games and camp activities for freshmen.
- Developed leadership, social, and communication skills through team bonding and group facilitation.
- Overcome the issue of engaging freshmen in virtual activities, despite the cultural change due to the COVID-19 restrictions being implemented.

**1 GUARDS, TEAM COMMANDER, SAF**

**Jan 2018 – Nov 2019**

**Reconnaissance Guards Sergeant, Team Leader**

- Educate discipline and impart knowledge on technical skills to my peers.
- To lead and inspire my peers to always strive for excellence and success in both missions and events.
- Led a team in the National Day Parade to successfully set up the area and establish crowd control.

**Meridian Junior College**

**May 2016 – Aug 2017**

**Table Tennis Captain**

- Planned camp activities and training schedules to foster teamwork and bonding.
- Developed training programs to guide new players and improve experienced players.
- Liaised with other schools such as Temasek Junior College for friendliness, and nurturing sportsmanship.
- Led the school's team to represent in the 'A' Division Boys' National 2017.

## **SKILLS / INTERESTS**

---

**Languages:** English, Chinese

**Programming:** Python, Java, HTML, CSS, JavaScript, SQL, Basic C++, C, C#.

**Skills:** MongoDB, MySQL, MS SQL Server, Express JS, Node JS, React, Unity

**Interests:** Table Tennis, Gym Training, Running, Programming, Piano Music

**Online Courses:** Microsoft Azure Fundamentals Course, Cyber Defenders Discovery Camp

**External Certifications:** Google Cybersecurity, Google Project Management, Google UX Design Introduction to C# Programming and Unity, Programming Foundations with JavaScript, HTML, and CSS, Cloud Computing Foundations, Algo Foundry Fundamentals, Associate of (ISC)<sup>2</sup> (In progress for CISSP)