# WILSON **NG** Jing An

**Email:** wilson\_ng@u.nus.edu | **Phone Number:** +65 98645066 | **Nationality:** Singaporean **Website:** wilsonngja.vercel.app | **LinkedIn:** www.linkedin.com/in/wilson-ng-jing-an

#### **EDUCATION**

#### **National University of Singapore (NUS)**

Aug 2021 - Present

- Bachelor of Engineering in Computer Engineering
- Current Cumulative Average Point (CAP): 4.15/5.00
- Expected Date of Graduation: May 2024

### Singapore Polytechnic (SP)

Apr 2016 - Mar 2019

- Diploma in Computer Engineering (Specialised in Computer Networking and Application)
- Grade Point Average (GPA): 3.93/4.00
- Vice-Captain of SP Table Tennis, Member of Singapore Polytechnic Outstanding Talent (SPOT), Member of SP EEE Student Ambassador

#### SKILLS AND ABILITIES

#### **Programming Skills**

• C, C++, Python, Arduino, Bare Metal Programming Language, Verilog Hardware Description Language (HDL), HTML, CSS, JavaScript, Svelte, Numpy, Scikit-learn toolkit.

# **Database Management**

MongoDB, mySQL, PostgreSQL

#### WORK EXPERIENCE

#### Transport Operator, Republic of Singapore Air Force (RSAF)

Aug 2019 - Dec 2021

- Trained newly return transport operators that recently graduated from SAF driving school to ensure that the transport operators are proficient to drive independently.
- Planned driving program and training schedule for the department with more than 30 members.
- Contributed to Tengah Airbase operations through over 4,000km of driving operation.

# Software Engineering Intern,

# **Centre Strategic of Infocomm Technologies (CSIT)**

Mar 2019 - May 2019

- Developed a data visualization software using Python programming language to allow key entities to be visualized in a nodal graph.
- Improved data visualization process through web scrapping and data cleaning.

## RELEVANT PROJECTS

#### **Embedded System Engineer, Remote Controlled Robot**

Jan 2023 - Apr 2023

• Implemented a robot, powered by ARM Cortex M0+ that can be controlled through mobile application that sends instructions through UART with the use of ESP32.

• Improved efficiency using RTOS techniques such as Scheduling, Semaphores and Mutex to allow the robot to respond to instructions.

# Software Engineer, Property Rental Manager

**Aug 2022 - Nov 2022** 

- Developed a software application in Java as a module to learn Object Oriented Programming (OOP).
- Implemented exception handling strategies to improve the robustness of the software.

#### Full Stack Developer, MeetUps

May 2022 - Jul 2022

- Led a software engineering project that developed a web application for NUS students to identify their common slots.
- Maintained documentations and revision control that helps with future references.
- Improved MeetUps by adding venue filtering according to a given timetable.

# **Embedded System Engineer, Search & Rescue Robot**

Aug 2021 - Nov 2021

• Built a Search and Rescue robot in a team of five using LiDAR sensor to conduct SLAM operations for a module project in NUS.

#### HACKATHONS AND COMPETITIONS

#### Software Engineer, Nus Timetable Checker

14 Jan 2023 - 15 Jan 2023

• Led a team of 4 members to develop a working telegram bot in Python that generates remaining timetable of the user for the rest of the week within 24 hours of Hack & Roll 2023.

## **Table Tennis Participants, POL-ITE Games 2018/2019**

Oct 2018

• Coordinated with the coach to plan the line-up of 7 players for the matches against other polytechnics and managed to acquire the gold medal.

# **Community Services**

# Organising Member, iLed

Oct 2017

• Volunteered in a Student Led Initiative to promote technical education by teaching Tanjong Pagar residents Arduino Programming with age ranging from 12 to 70 years old.

#### **AWARDS**

- Certificate in NUS Orbital (Apollo 11) Level of Achievement
- Diploma with Merit (Diploma in Computer Engineering @ Singapore Polytechnic)
- Model Student Award
- SP EEE Director Honour Roll AY2016/2017 and AY2017/2018
- POL-ITE Games 2018/2019 Gold Medal (Table Tennis)
- CSIT Diploma Scholarship

# ADDITIONAL INFORMATION

- Microsoft Skills: Excel (Including Macro), Word, and PowerPoint
- Languages: Fluent in English and Chinese (Both spoken and written)
- Proficient in Circuit Design, Computer Architecture and Web Development
- Familiar with Digital Signal Processing (DSP) knowledge