# **Shermern Ang**

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#### **EDUCATION**

#### Carnegie Mellon University - B.S. Computer Science

May 2025

- GPA 4.0/4.0, Dean's List
- Introduction to Computer Systems, Great Ideas in Theoretical Computer Science, Principles of Imperative Computation, Principles of Functional Programming

# **WORK EXPERIENCE**

NASA - Researcher Jan 2023 - Present

- Cooperated on NASA contracted project for pose estimation of spacecraft through machine learning
- Created and curated a comprehensive dataset of spacecraft images using the Basilisk simulator for training and evaluation purposes
- · Collaborated with researchers in the Robotics Exploration Lab, CMU, in refining pose estimation algorithm

#### Singapore Armed Forces - Lieutenant

Dec 2020 - Feb 2021

- Managed a 40 men for operations and training daily as Commander of Traffic and Presidential Guards Platoon
- · Oversaw training and coordination for a Unit of more than 500 men as Training Coordination Officer
- Commissioned in top 10% of cohort as a 2<sup>nd</sup> Lieutenant and awarded Platoon Best for Fitness

# **PROJECTS**

C0 Virtual Machine - C May 2023

- Created core components of a virtual machine for C0, a subset of C, including instruction set, stack-based architecture, and memory management
- Implemented a lexer and parser to handle C0 language syntax and generate bytecode for execution

#### Sudoku - Python, OCR, Selenium

Dec 2022

- Designed and developed a Python-based Sudoku game from scratch
- Coded a Sudoku solving algorithm, optimizing it for efficiency and accuracy to ensure generation of solvable and challenging puzzles

# Automated Booking System - Python, Selenium

Sep 2021

• Implemented a Python-based application to automate booking of driving lessons in Singapore, expediting learning period for multiple users from a three months to one

## **EXTRACURRICULARS**

## **CS** for Ukraine - *Instructor*

Jan 2023 - Present

 Designed and delivered interactive Python programming lessons to Ukrainian teenagers, fostering interest and proficiency in coding

#### **Singapore Students Association - Treasurer**

Nov 2022 - Present

 Oversaw financial operations, negotiated and secured sponsorships, grants, and partnerships to supplement association's financial resources and enhance its initiatives

## **OTHERS**

#### **Technical Skills**

• Python, C, SML, React, SQL, HTML, CSS, JavaScript, GitHub, Linux, Vim, Basilisk, Leadership

# Languages

· Native proficiency in English and Mandarin Chinese, Beginner proficiency in Japanese

#### **Interests**

Blockchain, Enterprise, Security, Startup, Venture Capital, Design, Running, Gym, Stenography