ANDERSON LEONG

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Available for Full-Time employment from July 2024 onwards

EDUCATION

National University of Singapore

Aug 2020 – Jul 2024

Bachelor of Engineering (Computer Engineering)

• Awarded ASEAN Undergraduate Merit Scholarship (Full coverage with allowance)

Uppsala University

Jan 2023 - Jun 2023

Student Exchange Programme

Courses: Cryptology, Parallel Distributed Systems, Internet of Things

WORK EXPERIENCE

d.Construct Robotics

Jan 2024 – June 2024

Assistant Software Engineer – C++, Typescript, Solid.js, WebAssembly

- Designed and implemented the frontend UI for a webapp
- Implement new features for the webapp using C++, wasm, and typescript to achieve near native performance

NXP Semiconductors

May 2022 - Dec 2022

Product Engineering Intern - Python, Pandas, Tensorflow, IronPython

- Utilized Convolutional Neural Network to classify graphs based on shape with over 90% accuracy
- Experimented with Generative Adversarial Network models to create realistic synthetic data on AWS cloud
- Developed GUI to export 150 gigabytes of labelled semiconductor data from TIBCO Spotfire within minutes

CO-CURRICULA EXPERIENCE

Residential College 4 House Committee

May 2021 – May 2022

Executive Committee - Head of House

- Directed a committee of 25 people to plan and execute events and welfare for over 100 residents
- Partnered with the College Students' Committee to assist in college-wide events of over 400 participants
- Attained 94.2% approval ratings among 120 voters during elections

National University of Singapore Student Union Student Life Fair

Jan 2021 - Oct 2021

Executive - Marketing Executive

- Negotiated with at least 15 companies on sponsorship matters
- Secured over \$150,000 worth of products for give-away goodie bags
- Facilitated virtual event with a strong outreach totalling 7,596 visitors

ACADEMIC PROJECTS

Data Structures and Algorithm III (Uppsala)

Jan 2023 – Mar 2023

Student - Python, Bash Scripting, C++, SMT-Lib, MIP, SAT Solvers

- Constructed an MIP model that sieves 2×10^{17} possibilities to arrive at optimal answer within 5 minutes
- Scripted Python parsers for SAT encodings to solve over 30000 cases in under 5 minutes
- Implemented Stochastic Local Search for Investment Basket problem to get (sub)optimal solutions fast

Vigenère Cipher (Uppsala)

Jan 2023 - Feb 2023

Student - Python

- Visualised frequency charts of 29 Swedish text and characters to encryptions with Python
- Formulated a mathematical way to guess with more than 95% accuracy of keys from other teams

CG4002 Capstone Laser Tag

Aug 2022 – Nov 2022

Machine Learning Component - Python, Pandas, Scipy, Tensorflow, Xilinx, C++

- Coordinated a team of 5 students to create a 2-Player Augmented Reality laser tag
- Deployed a Convolutional Neural Network using TensorFlow accomplishing above 95% validation
- Achieved 99% expected result match during accelerator integration using Xilinx and C++
- Undertook responsibility of Game Engine and server communications to successfully predict 39/40 actions

ADDITIONAL INFORMATION

Languages : English (Advanced), Mandarin (Advanced), Malay (Basic)
Technologies : Python, C, C++, Java, SQL, JavaScript, React.js, Verilog