

Octavius Ete Tan Zhy Lam

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EDUCATION:

Carnegie Mellon University, Pittsburgh, PA

Bachelor of Science in Information Systems, Computer Science Additional Major : Aug 2022 - Dec 2025

- GPA 4.00/4.00, Dean's List with High Honours
- Extracurriculars: User Experience Association, Freedom by Design, DEI Centre Fellow Leadership Program
- Courses: Database Dev, Imperative Comp, Matrices, Functional Prog, Human-Centered Software, App Dev

WORK EXPERIENCE:

Carnegie Mellon University, School of Computer Science

Research Assistant @ VariAbility Lab (Advised by Prof. Andrew Begel) : Aug 2023 - Present

- Automating OBS Studio through scripting & machine learning for customisable video editing based on input
- Merged OpenAI's LLM Whisper model with Dynamic Time Warping for a 42% increase in transcription efficiency
- Analysed contemporary research and developed new transcription heuristics to enhance production yield

Materialise

Software Test Engineer Intern : May 2023 - Aug 2023

- Improved testing efficiency by 30% for MatUkraine's 3D software Mimics team, collaborated using Microsoft 365
- Performed build/integration/regression testing in Azure DevOps queries and Artifactory
- Coded Python scripts for automatic triggered bug validity, implemented by Agile and Scrum workflow

Scale AI

AI Data Trainer : May 2023 - Aug 2023

- Trained AI models in Python with data structures & algorithms, test cases, editorial proposals and summaries

TECHNICAL SKILLS:

Coding: Python, C/ C++, PostgreSQL, SML, Ruby on Rails, Linux, MongoDB, Processing (JS), React, HTML/ CSS/ JS

Miscellaneous: LaTeX, Figma, Agile, Illustrator, Indesign, Photoshop, Rhino, Excel

PROJECTS:

COVM (Dec 2023): Virtual machine emulating a memory-safe subset of C (bytecode, operational semantics, stacks)

Lexicon (June 2023): Python adjustable typing test, web-scraped (beautiful soup) levels, MVC & OOP framework

LEADERSHIP/ EXTRACURRICULARS:

Resident Assistant (August 2023 - Present): Curate residential life, logistics and support for 37+ students

Microsoft Student Ambassador (July 2023 - Present): Worked with uni students to create outreach STEM events

YPolitics Editorial & Researcher (May 2023 - Present): Read by 18000+ youths, improved output by 45%

NAMSA Communications Officer (May 2023 - Present): Liaised 5000+ students, increased engagement by 35%

AWARDS/ HONOURS:

Gold Medalist: The Queen's Commonwealth Essay Competition (2022) • 1/154 gold medals [out of 26,322 students]

Distinguished Achiever: NSW HSC Society & Culture, Math Ext 1, Design & Tech (2021) • Top 10% of all students

VOLUNTEERING:

Hour of Code (May 2023 - Present): Created seminars in Python + C for 200+ youths, organised and led team of 5

Kechara Soup Kitchen (June 2021 - Dec 2021): Automated backend medical/ logs using SQL for efficient tracking