

Reiden Ong

Year 1 Computer Science Undergraduate, National University of Singapore
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EDUCATION

- Temasek Junior College**, Integrated Programme 2015-2020
- GCE 'A' Levels: 90 Rank Points, H3 Mathematics
 - ACE Award for Holistic Excellence (2021, 2022)
 - DSTA JC Scholarship Recipient
- National University of Singapore** 2023-2027
- Bachelor's Degree in Computer Science
- GPA: 5.0
 - Dean's List (AY23/24 Semester 1)

EXPERIENCE

- Multimodal Saliency with Visual Transformers** 2023
- Research Intern with DSO National Laboratories*
- Developed a machine learning pipeline for extracting semantic information from multimodal data (images and text).
 - Implemented a saliency model using Visual Transformers to identify important information in extremely cluttered and noisy social media images.
 - Also developed a tool for image segmentation in classical computer vision to enable the saliency model to mimic human reading conventions.
- Home-Based-Learning Dashboards** 2020
- Front End Developer, in collaboration with Temasek Junior College*
- Student-led community service project to develop a web application to increase productivity of online Home-Based-Learning for both students and teachers during the pandemic.
 - Collaborated with the school across design processes, prototyping and feedback to build a fully functioning web app in HTML, Javascript and Flask, with a peak of over 300 live users.
- Image Recognition with Convolutional Neural Networks** 2019-2020
- Intern with the Singapore University of Technology and Design*
- Practiced research methodology on the use of various CNNs for image recognition, for application in a commercial cleaning robot
 - Performed transfer learning on 4 pre-trained models for image classification, then evaluating their overall efficiency with operational constraints. Done in Python3 with Tensorflow.
- Signal Processing and Acoustic Beaconing** 2017-2018
- Research Intern with CRADLE, Science Center Singapore*
- Built a frequency encoding/decoding engine in Python3 from scratch to investigate various parameters in sound encoding.
 - Introduced computer simulated interference of varying distributions to test the encoding robustness in real life noisy environments.
 - Attained Distinction at the Youth Science Conference Singapore in 2018.

SKILLS

- Programming Languages**
- Python3, Java, C++, Web development in HTML, JS and CSS
- Spoken Languages**
- English, Mandarin