Andrea Jessica D. Jaba

jabaandrea@gmail.com | +639081981376 | Github: adjaba

Education

Massachusetts Institute of Technology   **Cambridge, MA**

Bachelor of Science in Computer Science and Engineering; Inducted IEEE-Eta Kappa Nu (2020) (Beta Theta)   *May 2020*

Prospective Candidate for Master of Science in Computer Systems   *February 2021 – December 2021*

Relevant Coursework: Computer Systems Security | Interactive Data Visualization | Software Systems for Data Science | Cryptography and Cryptanalysis | Software Construction | Design and Analysis of Algorithms | Computer and Network Security | Advances in Computer Vision | Electronics Project Lab

Experience

MIT Decentralized Information Group   **Cambridge, MA**

Undergraduate Researcher   *September 2019 – May 2020*

- Developed a pipeline to generate decision trees with interpretable human-aligned explanations from CNN-based image classifiers using concept decomposition

NCSOFT   **South Korea**

Global Intern   *June - August 2019*

- Built a web UI for machine learning image style transfer to expedite game icon creation that uses alpha blending to optimize network requests and generate up to 25 icons for each of 40 alpha values in seconds with React and Flask
- Designed and implemented a web tool for video scene annotation using React, Node.js, and SQL supporting browser video frame seeking, undo/redo and restore session functionality, as well as user input validation

MIT Edgerton Center   **Cambridge, MA**

Undergraduate Researcher   *March - May 2019*

- Implemented an Android app feature aimed to aid in safe communication between survivors of human trafficking

BetterLesson   **Cambridge, MA**

Winter Extern   *January - February 2019*

- Updated existing React, Flask and SQL code to add 4 new features to the external-facing website
- Conducted extensive testing while developing components to match mock design specifications

Computime   **Hong Kong**

Assistant Engineer   *June - August 2018*

- Built Python scripts to transport millions of log entries from Splunk to Kafka for future machine learning applications
- Created and tested an internal-facing website from scratch with a browsable REST API to streamline storage and distribution of device OTA updates that supports user authentication and multiple permissions using Django and AWS
- Modified existing Java code to gather relevant weather information from third-party API
- Integrated and cleaned user logs to generate insights on user habits and behaviors for a more intelligent thermostat

MIT The Center for Brains, Minds & Machines   **Cambridge, MA**

Undergraduate Researcher   *January - May 2018*

- Assisted in designing a deep learning framework combining Tensorflow and PyTorch during weekly meetings
- Examined and operated data conversion code on Openmind, an on-campus GPU computing cluster

Leadership

MIT Southeast Asian Service Leadership Network   **Cambridge, MA**

Co-President (2018, 2019), Treasurer (2017)   *September 2016 – May 2020*

- Collaborated with a team to promote Southeast Asian culture in MIT through cultural and community events
- Organized fund-raising initiatives for summer service-leadership projects held in Southeast Asia
- Managed the overall budget of over $2000 for the club's effective use of resources

Mathematics for Computer Science; MIT   **Cambridge, MA**

Teaching Assistant   *September - December 2018*

- Lead two weekly recitations and provided additional instruction and feedback in office hours for a 400+ student class
- Wrote problem sets, graded exams, and designed and presented exam preparation sessions

Skills and Activities

Software: Proficient in Python, Java | Intermediate React, HTML, CSS, JavaScript | Elementary Linux, MATLAB, SQL
Activities: Gordon-MIT Engineering Leadership (GEL) Program, LeaderShape Institute, Asian Dance Team, MIT TechSec
Volunteer: Code For Good (Consultant), WiSE (Mentor), MIT CityDays (Volunteer), MIT TechCon (Volunteer), Splash (Mentor)

Languages: Proficient in English, Mandarin, Hokkien, Filipino | Intermediate Proficiency in Korean