

# Jittisa (Jane) Kraprayoon

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## EDUCATION

### Columbia University, The Fu Foundation School of Engineering and Applied Science

New York, NY

*B.S. in Computer Science, GPA: 3.95*

*Expected May 2025*

- Relevant Coursework: Computer Vision, Parallel Functional Programming, iOS Mobile App Development, Machine Learning, UI Design, Computational Robotics, Applied Machine Learning, Natural Language Processing, Databases, Computer Science Theory, Artificial Intelligence, Advanced Programming in C, Computer Systems Fundamentals, Data Structures in Java, Python for Engineering, Multivariable Calculus, Discrete Mathematics

## EXPERIENCE

### Software Development Engineer Intern

May 2024 – August 2024

*Amazon*

*Palo Alto, CA*

- As part of Amazon Search, worked on a team that developed internal tooling to provide data for machine learning teams to train their models on. Wrote a design document and developed additional backend infrastructure to perform data transforms that is estimated to save \$1.1M from our product costs annually.
- Used AWS CDK to build the project's stack, including working with S3, Step Functions, Lambda, IAM roles, Glue, and various other AWS tools. Deployed the stack to production and monitored its performance.
- Refactored PySpark code and ran data jobs using EMR clusters. Performed data validation and presented project results.

### Teaching Assistant

January 2024 – Present

*Department of Computer Science, Columbia University*

*New York, NY*

- As a teaching assistant for Artificial Intelligence (COMSW4701) and Discrete Mathematics (COMSW3203), I conducted office hours, led review sessions, and graded assignments for over 300 students, ensuring they received support and feedback to succeed in the courses.

### ML Research Assistant

May 2023 – July 2023

*MIR Lab, Harvey Mudd College*

*Claremont, CA*

- Designed and programmed infrastructure to work on projects involving music, signal processing and machine learning. Published our paper as first author in the Applied Sciences journal.
- Implemented testing benchmarks and variations of the dynamic time warping algorithm to improve robustness.
- Tested neural nets and LLMs on different encodings of musical data using TensorFlow and Hugging Face transformer libraries.

### Research Assistant

May 2022 – May 2023

*Rights CoLab & Columbia University Data Science Institute*

*New York, NY*

- Built a sentiment analysis model to use with our data consisting of FactSet's Truvalue Sustainability Accounting Standards Board (SASB) Spotlight Events dataset (which track more than 230,000 companies), proxy statements and Form 20-Fs.
- Used NLP to identify financially material human rights violations to incentivize companies to implement better supply chain practices. Run data through a bag-of-words model which achieved 90% accuracy and analyzed results.

## PROJECTS

### GoSaleng - Hackathon ULeague For All (Thailand National Hackathon) 1st Prize

June 2022 – August 2022

- Worked with two other students to develop and present a project idea that won 1st place out of 36 teams. Pitched the idea and demonstrated the product prototype at a convention, advancing through two rounds of judging.
- Performed market research by interviewing more than 30 Saleng and companies in the recycled trash industry.

### Mind Galaxy - Creatica Hackathon 1st Place Hack

April 2022

- Collaborated with three other students using HTML, CSS, JavaScript, and JSON to build a website which won 1st place out of 463 participants.
- Developed "Mind Galaxy," a gamified mental health assessment tool inspired by the CES-D scale to make initial depression screenings more accessible and engaging.

## LEADERSHIP & COMMUNITY INVOLVEMENT

### Internal/External Lead (Co-President)

August 2023 – Present

*Executive Board of Application Development Initiative*

*New York, NY*

- Organize and host events and workshops throughout the year open to 300 students with an aim to foster a community of students interested in technology and Computer Science at Columbia. Help plan and organize DevFest, Columbia's largest hackathon.

### Tutor

December 2020 - December 2022

*Project HelpUGrow, Robogals, and Girl Scouts*

*Bangkok, Thailand and Online*

- Tutored Science and English to non-native speakers for over 200 hours and 40 students. Planned and conducted hands-on STEM workshops for 5th grade Girl Scouts to foster creativity and excitement about science.

Other Activities: Rewriting the Code, Columbia Club Soccer, Thai Club

## SKILLS

**Skills:** Python, C, iOS/Swift, HTML/CSS, Java, JavaScript, Node.js, React.js, React Native, SQL, MySQL, R, AWS, TensorFlow, PyTorch, Data Science, Research, Prototyping

**Languages:** English, Thai