

EDUCATION

Yale University

Ph.D. in Computer Science

Advisor: Brian Scassellati

New Haven, CT
expected May 2028

Carnegie Mellon University

B.S. in Artificial Intelligence GPA: 3.85/4.00

Pittsburgh, PA
May 2022

- School of Computer Science (SCS) Concentration in Human Computer Interaction
- SCS College Honors, University Honors, Senior Leadership Recognition Recipient: May 2022
- Phi Beta Kappa: November 2021
- Dean’s List, High Honors: December 2020, May 2021
- Dean’s List: May 2019

EXPERIENCE

The Robotics Institute, Carnegie Mellon University

Research Assistant at Transportation, Bots, & Disability Lab

Pittsburgh, PA
September 2019–May 2022

Advisor: Aaron Steinfeld

- Conducted research on how a mobile robot should rendezvous with a visually impaired user in indoor settings in a safe and socially acceptable manner such that the user can find it easily and trust it to guide them to their desired destination.

Stanford HCI Group, Stanford University

Summer Undergraduate Research Fellowship

Stanford, CA
June 2021–August 2021

Advisor: Michael Bernstein

- Conducted research on whether a language model like GPT-3 can mimic the way humans talk to it and potentially act in line with the beliefs humans have about it, which can help us understand if a self-fulfilling prophecy phenomenon can occur and what can we do to ensure that human-chatbot interaction abides by specific community guidelines.

SCB Abacus

Software Development Intern

Bangkok, Thailand
May 2019–August 2019

- Designed and developed a software development kit (SDK) for a mobile lending platform that serves the underbanked population in Thailand, called MoneyThunder. The SDK functions as a pipeline that asynchronously process users’ data from IOS and Android mobile devices, transforms raw data, sends them to cloud storage, and notifies backend services.
- Designed a JSON schema that transforms raw users’ data and represents them in a meaningful format to facilitate feature engineering and credit-scoring processes.
- Supported the development of a mobile background task scheduling module that periodically extracts users’ behavior and sends daily reports to cloud storage for long-term credit-monitorings.

Kasikorn Labs, Kasikorn Business Technology Group

Product Management Intern

Nonthaburi, Thailand
June 2017–July 2017

- Completed the design of customer journey, UI prototype mockups and defined the business metrics for four features on lifestyle banking and merchant mobile apps.
- Supported the new product planning and architecture of a blockchain-based digital identity and document storage.

PUBLICATIONS

1. **Jirachaya “Fern” Limprayoon**, Nicholas C. Georgiou, Natnaree “Proud” Ua-arak, and Brian Scassellati. 2024. The Effects of a Gossiping Robot on Team Cohesion. In The 33rd IEEE International Conference on Robot and Human Interactive Communication (RO-MAN’24).
2. **Jirachaya “Fern” Limprayoon**, Prithu Pareek, Xiang Zhi Tan, and Aaron Steinfeld. 2021. Robot Trajectories When Approaching a User with a Visual Impairment. In The 23rd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS ’21).

TEACHING

- **CPSC, Yale University** September 2023–Present
Teaching Fellow for Intelligent Robotics (CPSC-472/572)
 - Assisted students in understanding concepts for construction of intelligent, autonomous systems, sensory-motor coordination, and task-based perception by hosting weekly office hours.
- **CPSC, Yale University** January 2023–May 2023
Teaching Fellow for Introduction to Human-Computer Interaction (CPSC-429/529)
 - Assisted students in understanding introductory human-computer interaction concepts and some applications by hosting weekly office hours and facilitating in-class activities.
- **SCS, Carnegie Mellon University** January 2020–March 2020, January 2022–March 2022
Teaching Assistant for Concepts in Artificial Intelligence (07-180)
 - Designed both written and programming assignments, as well as their corresponding auto-grader scripts.
 - Assisted students in understanding introductory Artificial Intelligence concepts and some applications by hosting weekly office hours.

SKILLS

- **Technical:** Python, C, Swift, Kotlin, SML, ROS, Git, MATLAB, SQL, C++, Firebase, HTML, PyTorch, TensorFlow, R, NodeJS, ReactJS, MongoDB
- **Design:** Figma, Adobe InDesign, Miro, Adobe Illustrator

LANGUAGES

- **Thai:** native
- **English:** fluent

PROJECTS

- **YPaths (2023)** Project website: <https://www.ypaths.org>
With a team of seven, designed a platform for Yale College students to plan their course path throughout their undergraduate career.
 - Conducted semi-structured interviews with Yale College students to understand their pain points of deciding which major to pursue.
 - Led the design of user journey and UI development, including connecting front-end web-app interface to our database.
- **Thai Help Thai (2019)** Project website: <https://www.behance.net/gallery/84336335/Thai-Help-Thai>
With a team of seven, designed a proof of concept for a database platform for the Thai Embassy to connect Thai and Thai American students, recruiters, and professionals in the US and Thailand.
 - Conducted contextual inquiries and semi-structured interviews with recruiters in Thailand to understand their pain points of connecting to Thai/Thai American students abroad.
 - Led the design of customer journey and UI prototype mockups, and privacy protocols.
- **Red Robot Hackathon (2018)**

With a team of four, built a smartphone-controlled robot with a mechanism to capture a table tennis ball by using two wheels spinning towards each other to compete in a Quidditch (a fictional sport from Harry Potter) tournament.

– Won GM Motors Best Driving Award.

- **MATLAB: Score to Sound (2016–2018)**

Applied the concepts of optical music recognition and text-to-speech to create a learning tool that allows people with visual impairments to learn music more independently.

PEER REVIEWS

- ACM/IEEE International Conference on Human Robot Interaction (HRI) Late-Breaking Reports: 2023

UNDERGRADUATES AND HIGH SCHOOL STUDENTS MENTORING

- Fall 2023: Proud Ua-arak (Yale)
- Summer 2023: Jennifer Truong (Yale: STARS), Yu-An Chen (Yale-NUS),
Mari Arnold (Highs School: Yale Pathways)
- Spring 2022: Erin Chong (Yale)

EXTRACURRICULAR ACTIVITIES

- **Yale Computer Science Graduate Student Advisory Committee (GSAC)** 2023–Present
Meet regularly as a committee that provides a liaison between the faculty and the graduate students in matters pertaining to the Computer Science curriculum and the graduate students' use of departmental resources. Plan department-level monthly social events for graduate students.
- **Disability Pride PA Planning Committee** 2023
Participate in meetings around advocacy for people with disabilities and help organize events across Pennsylvania.
- **School of Computer Science (SCS) Dean's Undergraduate Advisory Committee** 2021–2022
Founder and Chair of the Accommodations for Blind and Deaf Students Subcommittee: Meet biweekly to discuss challenges and opportunities that undergraduate peers experience and meet periodically with the Dean to suggest solutions and ideas on an advisory basis.
- **SCS4Accessibility - SCS4All** 2021–2022
Founding Member: Meet biweekly to discuss challenges that School of Computer Science (undergraduate and graduate) students with disabilities are facing and opportunities to make SCS classes, seminars, hackathons, and other activities more inclusive to everyone. Meet periodically with the SCS Associate Dean of Diversity, Equity and Inclusion to suggest solutions and ideas on an advisory basis.
- **ABLE CMU** 2021–2022
Participate in discussions around advocacy and social support for students with disabilities and chronic illnesses.
- **SIAM - Undergraduate Thai Society** 2018–2022
Senior Supervisor (2021), Co-President (2020), External Chair (2019): Organize campus-wide events to promote Thai culture to the CMU and Pittsburgh communities. Organize internal events to help members who are interested learn more about Thai culture. Connect CMU students to Thai companies and other Thai organizations. Render assistance on Thai-related matters to the CMU administration and CMU Thailand, a collaboration between CMU and King Mongkut's Institute of Technology Ladkrabang.
- **Bangkok School for the Blind** 2015–2020
Volunteer Peer Tutor: Teach middle and high school students math, science, music, and English (both online and in person). Peer Counseling: help the students cope with both academic and non-academic stress.
- **The No Parking Players - Scotch'n'Soda Theatre** 2019
Participated in improvised comedy workshops and rehearsal twice a week. Performed at an annual Workshopper Showcase.