

Arun Wongprommoon

arunwpm@mit.edu

arun-wpm.github.io

(603) 416-9687

Cambridge, MA

Education

Massachusetts Institute of Technology (MIT)

Candidate for M.Eng. in Computer Science

Sep 2023 – Jun 2024

- Thesis topic: Audio-Visual Speaker Diarization and Speech Recognition using HuBERT
- Current coursework: 24.S90 Demystifying LLMs, 6.S898 Deep Learning, 6.S980 ML for Inverse Graphics

B.Sc. in Computer Science and Linguistics: GPA 5.0/5.0

Sep 2019 – Jun 2023

- Relevant coursework: 6.837 Computer Graphics, 6.806 NLP, 6.819 Computer Vision, 6.172 Performance Engineering

Internship Experiences

Robinhood: Android engineer intern (Cash Area; Peer-to-Peer Team)

Summer 2023

- Extended Robinhood's peer-to-peer transaction product to support multi-user cash payment and request
- Strengthened overall product by migrating code, adding test units, pushing features and addressing bugs

Duolingo: Software engineer intern (Monetization Area; Super Packaging Team)

Summer 2022

- Added onboarding screens right after purchasing Super subscription on Android, and tweaked purchase flow
- Incorporated Firebase analytics to better target advertisements to free users who are either likely to spend or churn
- Increased company's bookings by \$1,000 a day, found by running A/B test experiments and measuring metrics

Cambridge Mobile Telematics (CMT): Software engineer intern (Android SDK Squad)

Summer 2021

- Developed an Android app from scratch which demonstrates the usage of CMT's core SDK codebase and API calls
- Learnt Kotlin as well as technical concepts such as observers, subscribers, and fragments
- Improved company's customer reach and support, as the application serves as a fully functioning template

Undergraduate Research Experiences

Spoken Language Systems, MIT Undergraduate Research Opportunities Program

Spring 2023

- Examined MetaAI's unit-to-unit speech translation model without text representation that uses HuBERT and K-Means
- Constructed a multilingual translation model by concatenating vocabulary, increasing BLEU scores by a few points
- Researched various alternative state-of-the-art models, adapter training as well as finetuning frameworks

Improve the News, MIT Undergraduate Research Opportunities Program

Summer 2020, Spring 2021

- Collaborated with Max Tegmark to create an AI news aggregator which informs users of implicit bias in news articles
- Made an ensemble topic classification model combining GPT and BERT, achieving 80% precision on the *NYT* corpus

Ambient Detector

May 2016 – March 2017

- Made an Android app that recognizes and identifies sounds by recording, calculating the FFT and matching profiles
- Won third place in Thailand's National Software Contest for high school students, presented in assistive tech forums

Competitive Programming Achievements

International Olympiad in Informatics: Silver medalist (79th percentile)

2017

Google Code Jam: Round 2 finisher (95th percentile, 92nd percentile)

2020, 2021

USACO: Platinum division

2019

Clubs, Societies and Extracurriculars

The Tech, MIT's Student Newspaper

- Co-publisher, Managing Editor and Business Manager

2023

- Production Editor

2021 – 2022

MIT IEEE Eta Kappa Nu Honor Society: Marketing Officer and Executive Board Member

2022 – 2023

Skills

Data Structures, Algorithms, Kotlin, C/C++, Java, Python, Pytorch, Tensorflow, UNIX, Git, French, Thai

Interests

Photography, Video editing, 3D animation, Urban planning, Visual Arts, Design, Music, Squash, Bouldering