

# Taichi Kato

http://taichikato.com

Email : tkato24@amherst.edu

Mobile : +1-413-2754-569

## EDUCATION

---

- **Amherst College** Amherst, MA  
*Bachelor of Art in Computer Science and Mathematics* Expected: May. 2024
  - **Honours:** Davis UWC Scholar
- **United World College of South East Asia** Singapore  
*International Baccalaureate Diploma, 98th Percentile (43/45)* Aug. 2013 – May. 2020
  - **Relevant Coursework:** HL Mathematics, HL Computer Science, HL Physics, SL Philosophy
  - **Honours:** Bilingual Diploma in Japanese and English
  - **Thesis:** *Evaluating Marx and Nietzsche's ideas of entfremdung and ressentiment in the context of increased technological automation (Philosophy and Computer Science)*

## EXPERIENCE

---

- **Questo AI** Singapore  
*Co-Founder and Software Engineer* Nov. 2016 - Aug. 2020
  - **Built** a service that generates quizzes from learning materials
  - **Pitched** to investors, and was granted **\$160,000** in subsidised funding from Google and IBM.
  - **Led** a team of three for an organic marketing campaign, attaining **8,000 downloads** from ProductHunt(#1, 140+ upvotes) and HackerNews(500+, #1 Product of the Day)
  - **Researched and developed** a novel question generation algorithm modifying a neural translation model, collaborating with two other engineers, using **Numpy, Pandas, Tensorflow, and PyTorch**. Shipped to production as micro services using **Python, Flask and Google Cloud**. Developed our deployment pipeline using **Docker, Kubernetes, and Travis CI**.
  - **Designed and developed** the iOS application using Swift and CoreML
  - **Designed and developed** machine learning solutions for consulting clients, generating **\$56,000** in revenue.
  - **Awarded** the Overall Winner Student Category @ IBM PitchIT 2016.
- **University of Tsukuba, Digital Nature Group** Tsukuba, Japan  
*Deep Learning Researcher Intern* Jul. 2018 – Aug. 2018
  - **Researched** 2D to 3D extrapolation with GANs under direct mentorship of Prof. Ochyai Yoichi. **Presented** a poster on the research.
  - Conducted literature review of GANs, and presented the findings using **Powerpoint**
- **Mercari, Inc.** Tokyo, Japan  
*Machine Learning Engineer Intern* Jun. 2018 - Jul. 2018
  - Collaborated with senior engineers and researchers to introduce edge computing to the pipeline.
  - **Minimized the size** of price prediction and object detection models **by 70%** using **PyTorch and Tensorflow** through quantization and pruning, allowing them to run on mobile devices without sacrificing accuracy. **Reduced the cost** required to process listings from **16 million monthly active users**
  - Rapidly **iterated on, and developed** an iOS prototype which gives price predictions of objects in the camera feed in real time. Youngest employee ever at 16 years old.
- **teamLab, Inc.** Tokyo, Japan  
*Software Engineer Intern* Jun. 2017 – Jul. 2017
  - **Initiated and led** the development of an internal Redux framework for iOS, which has been used extensively in company's future projects, collaborated with designers, business development, and back-end engineers on developing an iOS applications using **Swift**. Youngest employee ever at 15 years old.

## ACTIVITIES

---

- **Amherst College (2020 - Present):** Member of the Rowing team, Computer Science Club, Computer Intelligence Lab, Quantitative Trading Club, Investment Club, Philosophy Club, and Asian Students Association
- **Lead Organiser of YouthHacks (2017-2019):** Organised Singapore's largest pre-university hackathon. Raised over **\$5,000** for **180 participants**, from sponsors ranging from National Youth Council, Google, StartupX, and Reactor School. Reached out to mentors, judges and participants through organic marketing; Organised logistics and financing for the event. Held seminars on UI design and on utilising machine learning in hackathons.
- **President of UWCSEA Hack Club (2017-2020):** Taught 30+ computer science students in high school, teaching Python, Javascript, and gave seminars on introduction to machine learning.
- **President of UWCSEA Photography Club (2018-2020):** Instructed 20+ young students about fundamentals of photography and photo editing.

## PROJECTS

---

- **Zipcall (2020)**: Developed multi-client decentralised video-calling service. **100,000 MAU**.
- **Kafka NLP (2020)**: Developed the first-ever open-source implementation of dependency parsing on iOS
- **Bookworm (2019)**: Awarded the Best Pre-University Hack Prize@NUS Hack'n'Roll (331 hackers). Built a dictionary app which makes physical books interactive, using **OpenCV and React Native**
- **Photonify (2017)**: **Awarded \$30,000** for Most Creative@SWSG2017 – (550+ hackers). Built an app that analyses image composition, and displays real time guidance to improve mobile photography.
- **Hequals (2017)**: **Awarded \$500** for Pre-University Overall Winning Team @#codeathon 2017 (73 participating teams). Built a service that assigns GitHub tasks to people in a team based on previous commits, made to reduce bias in tech.