Fangyuan (Toby) Huang

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Full Stack Developer | Machine Learning Engineer

3+ years professional working experience. Passionate about turning brilliant machine learning ideas into scalable and easy-to-use web applications.

Education:

Northeastern University **Vancouver, BC**

M.S. in Computer Science, Jan. 2021 – Dec. 2022

GPA 3.9/4.0; Career Peer Advisor 2021; Teaching Assistant for Prof. Richard Hoshino (Fund. AI) 2022

University of Rochester **Rochester, NY**

M.S. in Data Science 2016 –2017; *B.S. in Mechanical Engineering* 2012 –2016

Skills:

Languages: Python, TypeScript, Java, Rust, Dart

Web Technologies: React, GraphQL, Flask, Django

Data Visualization: Matplotlib, Tableau

Databases: MySQL, PostgreSQL, MongoDB, Prisma

ML Frameworks: Pytorch, LightTorch, TensorFlow

Others: Git, Docker, Jest, Mocha, EC2, S3, Lambda

Software Experience:

Software Development Engineer (co-op) 2022 Jan. – Present

Makersights Inc. Vancouver, BC **[React, TypeScript, GraphQL, CSS, Storybook]**

- Delivered responsive components, reusable core modules, and landing pages to stakeholders including backend engineers, designers, and program managers. Shipped 70+ tickets.
- Applied best practices including BEM naming, Typescript, CSS variables, and Storybook deployment.
- Implemented CRUD using GraphQL with React useQuery and useMutation hooks.

Data Scientist /Machine Learning Engineer (full-time) 2019 Feb. – 2021 Jan.

Uipath Inc. Bellevue, WA **[Pytorch, Pytest, Flask, Docker, Git]**

- Collaborated with 20+ teammates from three different time zones; applied **transfer learning** to improve model accuracy by 4.5%;
- Built high-performance supporting models (90%+ accuracy) for downstream tasks, and reduced server responding time by 20% and memory consumption by 56%.
- Applied novel research in **computer vision** and **natural language processing** to develop and maintain a document understanding pipeline.

Integration for Indigenous Language Study with Machine Learning | Github 2021 May - 2021 Sep.

Guide by Prof. Michael Running Wolf, Northeastern Vancouver, BC **[Python, Qt.py, Flask, Docker]**

- Lead a team of 4 to combine several existing linguistic tools for indigenous study (g2p, readalongs, soundswallower), and created executable via pyinstaller and Qt.py for easier distribution.
- The software was a collaboration with Nationalk Research Council Canada (NRCC) and designed to help indigenous community with realistic difficulties and challenges.

Hobbies and Activies:

- Volunteer for Seattle Humane (animal shelter). Acquired basic dog training skills.
- Experienced Eng-Chn translator. Translated, validated, and generated subtitles for 12+ videos.
- Enthusiast in video game and reinforcement learning. Wrote AI solvers for pacman, n-queens, tic tac toe, etc.