# Fangyuan (Toby) Huang

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Software Developer | Full Stack Machine Learning Engineer

Passionate about turning brilliant machine learning ideas into scalable and easy-to-use software.

#### **Education:**

# Northeastern University | Vancouver, BC

Jan. 2021 - Dec. 2022 (Expected)

Candidate for a Master of Science in Computer Science; 3.9/4.0

Courses: Object-Oriented Design; Mobile App Development; Algorithms; Distributed Database System

#### University of Rochester | Rochester, NY

M.S. in Data Science; GPA 3.8/4.0

Sep. 2016 - Dec. 2017

Research Assistant at University Data Science Lab (SNAP).

B.S. in Mechanical Engineering; GPA 3.6/4.0

Aug. 2012 - May 2016

Minor in Math; Dean's List; American Society of Mechanical Engineers Social Chair (local Chapter)

#### **Skills:**

ML Frameworks: Pytorch, LightTorch, TensorFlow Languages: Python, Java, Dart, Go Databases: MySQL, PostgreSQL, MongoDB, Cassandra Web Technologies: Django, Flask, ReactJS, Bootstrap Data Visualization: Tableau, Matplotlib Others: Git, Docker, Unix, AWS (S3, Lambda, EC2)

## **Professional Experience:**

## Career Peer Advisor (CPA) and Event Design Lead

Jun. 2021 – Dec. 2021 (Expected)

Northeastern University

Vancouver BC

- Provide appointments for students ranging from technical mock interviews to resume checks and mental support.
- Lead event design for CPA West Coast team. Invite speakers, moderate panels, conduct informational interviews.

#### **Machine Learning Engineer/Data Scientist**

Feb. 2019 - Jan. 2021

Uipath Inc.

Bellevue, WA

- Applied novel research in **computer vision** and **natural language processing** to develop and maintain a document understanding pipeline (**Pytorch**, **pytest**, **flask**, **docker**)
- Collaborated with engineering 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%.

## Highlights of Interesting Projects - there are many, find more on my GitHub 😉



Integration for Indigenous Language Study with Machine Learning | Github

May 2021 - Ongoing

Guide by Prof. Michael Running Wolf, Northeastern Vancouver.

[Flask, Docker, AWS]

- Lead the backend team to combine several existing linguistic tools for indigenous study (g2p, readalongs), make them user-friendly and easy-to-scale, and deploy with Docker and AWS.

#### MVC Image Filter App with Cross Stitch Features | Github

Apr. 2021

Guided by Prof. Marine Jump, Northeastern Vancouver.

[Java, Junit, Jswing]

- Implemented a GUI app using the model-view-controller (MVC) design pattern. The app allows users to apply multiple effects (blur, sharpen, mosaic, pixelation), turn the modified image into a cross-stitch, and add text msg.