# Po-Yu Hsieh

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#### **EDUCATION**

Boston University, Boston, Massachusetts, United States

Sep 2017 — May 2019

Master of Science in Computer Science, GPA: 3.66

 Relevant Coursework: Computational Tools for Data Science, Advanced Databases Applications, Machine Learning, Data Mechanics, Natural Language Processing, Embedding Systems

#### National Taiwan University (NTU), Taipei, Taiwan

Sep 2009 — Jun 2014

Bachelor of Business Administration in Finance

- Major GPA: 3.68, CS courses GPA: 3.52
- Relevant Coursework: Wireless Networking, Digital Humanities, Digital Visual Effects

#### WORK EXPERIENCE

Klaviyo, Boston, Massachusetts, United States

Sep 2019 — Sep 2020

Data Science Software Engineer

- Supported team data scientists to gather service data for analysis and potential product ideas
- Sampled and compared service data from different sources to ensure data consistency of feature under development with other services
- Developed product prototype with React, Django, Flask as an internal analytics tool to obtain feedback from customer success and product design teams
- Maintained automated data collecting process for COVID-19 insight analysis<sup>[1]</sup>

#### Research Center for Digital Humanities, NTU, Taipei, Taiwan

Jan 2016 – Jul 2017

Research Assistant

- Developed 5 database building and text analysis webpage tools for DocuSky, a database platform to store and analyze text corpus<sup>[2]</sup>
- Introduced DocuSky and research findings using this platform at the 2016 Conference of Digital Archiving and Digital Humanities<sup>[3]</sup>

## **COURSE PROJECTS**

Boston StreetCaster<sup>[4]</sup> (Spark! Practicum, Boston University)

Spring 2019

- Collected sidewalk images from Google's street view API service based on Boston city's geographic street and sidewalk dataset, to help facilitate local sidewalk maintenance
- Provided workflow to transform location coordinates in original geographic dataset, and generate camera settings for API queries to capture images of specified area

## **DNA Sequence Image Identification**<sup>[5]</sup> (Boston University)

Fall 2018

- Classified type of DNA sequence from fluorescent-labeled DNA images
- Used RetinaNet, TensorFlow, and synthesized images to build up an image object identification model which can locate occurrence of DNA pieces in real image for further classification tasks

#### Writing Style Analysis (National Taiwan University)

Spring 2014

- Designed a Python 3 text analysis module to compare writing style or habit between different texts with 3 different approaches, then applied it in 2 novel authorship attribution cases
- Re-implemented the algorithm in JavaScript and provided as one of the webpage tools for DocuSky in 2016

### **TECHNICAL SKILLS**

#### Programming Language

Python, JavaScript (Node.js, ECMAScript 6, TypeScript), Java, C

### Databases, Web Applications, Development

• **Databases:** SQL (MySQL)

• Web Applications: Django, React, jQuery, CSS/SCSS, HTML

• Data Science: Pandas, NumPy

• Development Tools: Git/Github, Jupyter

### LANGUAGE SKILLS

- English (TOEFL Total 106 (2016); GRE V153/Q167/AW3.0 (2016))
- Mandarin (First Language)

## **REFERENCES**

- 1. Klaviyo's COVID-19 Insight Page: https://www.klaviyo.com/covid-19-daily-ecommerce-insights
- 2. DocuSky: https://docusky.org.tw
- 3. Talk Slides for DADH-2016: https://pse.is/3c42m3 (short URL)
- 4. StreetCaster Project Repo: https://github.com/ddehueck/BostonStreetCaster
- 5. XGenomes' Collaboration Project Repo: https://github.com/tnmcneil/XGenomesProject