Weifeng Hu

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EDUCATION

University of California – San Diego, CA 06/2020
Master of Science, Computer Science Engineering GPA 3.90/4.00
- Thesis: *A Data-Driven Study of Cross-Cultural Social Impressions on Faces*
- Relevant Coursework: Neural Networks, Natural Language Processing, Recommender System

University of Michigan – Ann Arbor, MI 05/2018
Bachelor of Science in Engineering, Computer Science GPA 3.83/4.00
- Graduated with the highest distinction - Summa Cum Laude
- Relevant Coursework: Machine Learning, Data Mining, Computer Vision, Security

SKILLS

Language Java, C/C++, Python, C#, JavaScript, MATLAB, SQL, MySQL
Computer Hadoop (MapReduce), Windows, Visual Studio, Android Studio, LaTeX, Linux

EXPERIENCE
Industry

Amazon Web Services Seattle, WA
Software Development Engineer II 04/2022 - Current
- Designed a scalable ETL data pipeline that derived search metrics from user activities and stored them into a data lake.

Skills: Java, Spark, AWS Glue, AWS S3, AWS Athena, AWS QuickSight

Software Development Engineer I 08/2020 - 04/2022
- Migrated website to client-side rendering that brought a modern, accessible UI and expanded number of trackable metrics.
- Redesigned a backward-compatible similarity model API that improved discovery for broader similar documents.
- Designed a distributed ingestion architecture that allowed bulk document update requests.
- Scaled ElasticSearch cluster vertically and horizontally that stabilized the backend index.

Skills: Java, React, RESTful API, Python, AWS ElasticSearch, AWS SageMaker

Software Development Engineer Intern 06/2019 - 09/2019
- Developed text processing modules that optimized existing methods of obtaining syntax usage.
- Wrote an abstract syntax tree to JSON parser that streamlined the analysis of the tree content.

Skills: Java, AWS DynamoDB

DiDi Chuxing Beijing, China
Machine Learning Engineer Intern 05/2018 – 08/2018
- Built an XGBoost model that predicted the completion rate based on the features of ride requests.
- Extended the model by analyzing big data that determined the minimum drivers needed.

Skills: Python, XGBoost

The MathWorks Inc. Natick, MA
Software Engineering Intern 05/2017 – 08/2017
- Implemented the initial version of a data visualization view that plotted parameters in JavaScript.
- Added keyboard navigation feature and corresponding unit tests that enhanced user experience.

Skills: JavaScript, MATLAB

Gocom Information & Technology LLC Hefei, China
Software Developer Intern 05/2016- 08/2016
- Developed Railway Automatic Testing Software with TCP/IP Socket in C# that improved testing efficiencies for human testers.
- Designed the communication protocol between programs that set up different testing conditions.

Research

Cross-culture Facial Impression Research — San Diego, CA
Research Assistant — 01/2019- 03/2020
- Developed a single deep neural network that predicted the ratings on 18 social impression traits.
- Worked on a GAN model that analyzed the effect of different physical attributes of the images.
- Built a website and performed statistical analysis that built groundwork for our studies.

Statistics and Visualization of Tornado Data Point-Patterns — Ann Arbor, MI
Research Assistant — 10/2015- 04/2016
- Visualized tornado landing intensity in the US for the past five decades.
- Applied kernel smoothing in a convolutional manner that provided interesting statistics.

PUBLICATION

Hu, W. A Data-Driven Study of Cross-Cultural Social Impressions on Faces (Publication No. 27834166) [Master dissertation, University of California, San Diego]. ProQuest Dissertations and Theses database.

Hu, W.*, Song, A.*, Yadav, D., Wen, F., Zuo, B., Vul, E., and Cottrell, G. Do you see what I see? A cross-cultural comparison of social impressions of faces. In *Proceedings of the 42nd Annual Conference of the Cognitive Science Society*, pp. 1714-1720. (* equal contribution)

Hu, W., and Yang, R. Predicting the success of Kickstarter projects in the US at launch time. In *Intelligent Systems and Applications* (Cham, 2020), Springer International Publishing, pp. 497–506.

TEACHING

Neural Networks & Pattern Recognition — Winter 2020
Recommender System & Web Mining — Fall 2019

PROJECT

Democrats vs. Republicans Tweet Sentiment
https://github.com/weifhu0124/democrat_republican_tweets

Automatic Comment Generation for Python Code
https://github.com/weifhu0124/Code_to_Comment

Superspreader Detection in the Dataplane
https://github.com/weifhu0124/Superspreader_Detection

GAN on MNIST Tutorial
https://github.com/weifhu0124/gan

Pedestrian Alert!
https://github.com/weifhu0124/person_detect

Call Me Maybe Android App
https://github.com/weifhu0124/Call-Me-Maybe-AndroidApp

AWARD

Graduate Student Association Travel Grant — UC San Diego
College of Engineering Class of 1935 Scholarship — University of Michigan
Dean's List — University of Michigan
University Honors — University of Michigan
James B. Angell Scholar — University of Michigan