

# HAOMIN HU

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## EDUCATION

**University of Rochester** Rochester, NY, USA  
**Bachelor of Science, Data Science | Bachelor of Art, Studio Art** 2017.09 – 2021.05

- Overall GPA: 3.46/4.00
- Programming Coursework: Machine Vision, Probability & Statistical method, Data Mining, Database Systems, Artificial Intelligence, Data Structures
- Studio Art Coursework: Photography, Cinematography, 2D Design, Film Editing, Film Developing

## SKILLS

**Programming:** JAVA, Python, Shell, HTML/CSS, R, SAS

**Tools/Frameworks:** Excel, MySQL, Spark, Linux, Tableau, Adobe Software, Azure, DaVinci Studio

**Language:** Proficient in both English and Mandarin, elementary in Spanish

## INTERNSHIP EXPERIENCE

**WeChat | Data Recommendation Group** Guangzhou, China  
**Data Analysis Team Leader** 2020.07 – present

- Retrieved the original data files of 5200 video sequences via PySpark from an HDFS path and expanded the attributes into 72 dimensions
- Compared related competing products such as Tik Tok and Kuaishou's historical Daily Active User and Session Length, and provided appropriate strategic decisions for the Video Recommendation as well as Operation team
- Targeted at the group of users aged 16-28 in the established personas and improved the recall recommendation pool with collaborative filtering algorithms, increasing Video Completion Rate by 18.3%
- Utilized Axure, Python, Spark and other software to conduct a competitive product analysis for WeChat short video product, and adopted the Word2Vec models to analyze the competitors' characteristics

**Airticketna LLC.** San Diego, USA  
**Data Scientist** 2019.11– 2020.05

- Cooperated with the group based on travel blogs to extract and visualize the travel information and related data
- Established unified rules and data standards, and imported the flights' data into MySQL database, facilitating the accurate flight itineraries retrieval
- Implemented feature selection to determine the key attributes, such as SID, STAR (flight departure and arrival procedures) and aircraft types, which affect the flight punctuality

**Shanghai Tongzan Movie Studio** Shenzhen, China  
**Cinematographer, Film Production Team** 2017.06 – 2017.08

- Interpreted client ideas creatively, collected the films' data in multiple facets based on clients inquires
- Analyzed the data on the photographic equipment to support Principal Director and Director of Photography's decisions on the film "To Us, from Us", which rated 6.9/10 on IMDb

## ACADEMIC EXPERIENCE

**Machine Vision Project | Group Leader, University of Rochester | Rochester** 2020.04 – 2020.05

- Developed a deep learning model based on Densenet 161 to predict the classes of actors and action in each frame on A2D dataset, which contains 3782 videos from YouTube
- Improved the model with additional linear layer and batch normalization layer with the precision 49.2, Recall: 49.6 and F1 score: 47.8. Ranked No.1 in undergraduate teams

**Social Science | Summer Research, Chinese University of Hong Kong | Hong Kong** 2019.06 – 2019.08

- Assisted Professor Sara Liao in collecting data about Digital Feminist Activism in China and studied the history of Chinese Feminist Activism throughout the past 30 years
- Interviewed the protesters and police officers during the 2019–20 Hong Kong Protests, and scraped the protesters numbers from the published data and plot the geographic heat map by geopandas package of Python

**Data Mining Project | Group Member, University of Rochester | Rochester** 2019.05 – 2019.06

- Developed an SVM model to label the potential churning customers based on the client data on the individual level, helping the bank to determine the targeting clients' type and lower the acquisition cost
- Predicted the users' choice on cancelling credit card on 13 attributes for 9956 users, achieving 79.4% accuracy