Siqi Fang

Tel: (+1) 315 273 9285| Email: sfang@hamilton.edu | Location: New York

EDUCATION

Hamilton College   Clinton, NY

Bachelor of Mathematics, Bachelor of Computer Science (GPA: 3.75)   Sep 2019 – May 2023

- **Relevant Courses:** Probability Theory, Intro to Statistics(SPSS), Algorithms and Data Structure(C++), Linear Algebra, Multivariable Calculus, Discrete Math(Python), Programming Languages(OOP)
- **Honors**: Dean's List (2019, 2020, 2021)

SKILLS

- **Programming:** Python (numpy, pandas, seaborne, scikit learn, xgboost), SQL, R(ggplot2, tidyverse, shiny, plotly), JavaScript, CSS, HTML, assembly, C++
- **Tools**: Git, Jupyter Notebooks, LaTeX, Microsoft Office Suites

EXPERIENCE

Neural Network Summer Research   *Github*   Remote

Hamilton College, Supervisor: Prof. Perkins   Jun 2020 – Aug 2020

- Collaborated with 3 students on researching Liquid State Machine(LSM), a supervised spiking neural network model, to recognize abstract temporal signals that mimic human speech
- Implemented LSM model with a human brain based motivated structure from scratch in Rust, and trained model to recognize input with different noise level and time steps
- Identified the most important parameters influencing model accuracy and potential applications of LSM in speech, video and large scale image recognition

Research and Data Science Tutor   Clinton, NY

Hamilton College Library Research and Design Desk   Sep 2021 – Present

- Completed training on statistics basics, SQL, data analysis and visualization in R
- Desk hours at the library providing data science and research support to community members
- Collaborated with 5 tutors and supervisor on community data projects using R

Teaching Assistant   Clinton, NY

Hamilton College Computer Science Department   Jan 2020 – Aug 2020

- Assisted in the course planning and grading of Discrete Math, and held office hours to offer homework and project help to 100+ students in various intro CompSci courses

PERSONAL PROJECT

Brawl Stars Battle Result Prediction   *Github*

- Predicted the BrawlStars battle result with pre-game statistics with Random Forest Classifier
- Collected the data of 6000+ players' battle logs from Supercell API
- Built pipeline to clean and engineer data and performed exploratory analysis with Python
- Tuned model with cross validation and improved accuracy score to 87%

JanataHack: Machine Learning for IoT   *Github*

- Predicted Traffic Pattern from TimeSeries Data from 4 sensors with 4 XGBRegressor models
- Performed feature engineering, data visualization and exploratory analysis in Python
- Tuned the models to achieve 9.62 RMSE and ranked 5% on the private leaderboard

ATOP Data Visualization Dashboard   *Github*

- Wrangled data from Alliance Treaty Obligations and Provisions(ATOP) database with R
- Created visualizations by topics using ggplot and plotly and built dashboard using R shiny