

NICK SAWHNEY

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PROFILE

I am a Software Engineer working in economic research with a passion for accessible data, manageable complex systems, and social impact. I have demonstrated engineering, research, and management experience, and I hope to find a challenging position where I can help solve hard problems. Learn more about my work at <https://nicksawhney.github.io/me/>

SKILLS

Python, SQL, Go, C++, JavaScript, Java, Numpy, Sklearn, Tensorflow, Keras, Matplotlib, Pandas, AWS, Azure, Elasticsearch, nltk, OpenAI Gym, Flask, Django, Google Cloud, Docker, SQL, Excel, Pytest, Git, REST APIs, Data Analysis, Machine Learning, Neural Net Architecture, Natural Language Processing, Jupyter, Shell, and others.

EDUCATION

NYU College of Arts and Sciences: BA in Computer Science and International Relations with Honors, c.o. 2020

GPA: 3.87, Magna Cum Laude

EXPERIENCE

Software Engineer - Macroeconomics Research Group — 2021-Present

Built and updated heterogenous agent macroeconomic simulation library in python. Created microservices cloud architecture to deploy simulations and handle message-passing between processes on Azure using docker containers. Conducted analysis on simulation results and co-authored macroeconomics research paper.

Developer - Bernie Sits App — 2021

Built and scaled viral meme-creation application using Flask, CV2, Google Maps, and Heroku amidst press attention. Covered in BuzzFeed, Wired, NYTimes, Insider, and others. Managed crowdfunding to pay for API costs, totaling at 9.8 million site requests over 4 days.

Software Engineering and Data Science Intern - Skopos Labs — 2019-2020

Built and maintained financial simulation and ETL library for machine learning engineers using Pandas, with pipelining and automation using AWS EC2, SQL, ElasticSearch, and Boto. Managed interns working on data science projects and taught visualization tools, e.g. seaborn. Focused on developer-oriented and test-driven development using nose and pytest.

Thesis in Social Statistics — 2020

Designed difference-in-differences model to predict the impact of fare-evasion arrest decriminalization on arrest patterns in the New York City subway system. Created datasets with NYC Open Data and pandas. Created interactive data exploration map with Folium in Python. https://nicksawhney.github.io/fare_evasion/

Software Engineer - NYU Social Media and Political Participation Lab — 2021

Designed and implemented data visualization dashboard showing historic and real-time twitter data in order to enable data accessibility and intuition for machine learning engineers. Tools used include Plotly, Flask, MongoDB, and Pandas.