JASPER GILLEY

Strategy-minded software engineer with a track record of value creation

EXPERIENCE

Full Stack Engineer (Consulting) – Propeller Industries   *August 2018–Present*
- Created an order-of-magnitude productivity boost for offshore employees by working closely with CTO to design a Django/computer vision document feature extraction system
- Responsible for client-facing data analysis & visualization, in addition to developing new software and performing code maintenance

Backend Software Engineering Intern – Relativity   *June–August 2020*
- Responsible for optimizing deployment channels used by one-third of company developers
- Built a code scanning system that cut deployment times by 7%, a value add of $3mm/yr

Computer Vision Researcher – Northwestern Football Team   *August 2019–June 2020*
- Led the team that created the first-ever computer vision analytics system for a major college football program. PyTorch-based system extracts data about formations and routes
- Resulting project remains in use to the present and reduces coaches' scouting timespend 5x

Software Engineering Intern – Constellation Technologies   *June–August 2019*
- Spun up AWS EC2/RDS instances and had full ownership over Techstars company's servers & APIs
- Created Slack bot which reduced server downtime response times by 50%

Software Engineering Intern – Propeller Industries   *June–August 2018*
- Worked directly with COO to creatively integrate technology into business processes
- Built ETL pipeline that gave company leadership 75% faster access to realtime BI data

PROJECTS

GPT-2 Song Lyric Generator
TensorFlow model trained on a dataset of pop music lyrics (Python, TensorFlow)
· Paper   · GitHub repository

Beer pong-playing robot
Raspberry Pi-based robot that won audience award at IEEE Demo Day
· GitHub repository

Fantasy football website
Stateful implementation with a Django + PostgreSQL backend
· GitHub repository

Reimplementation of Sci-kit Learn
Custom implementation of core Sci-kit Learn modules in vanilla NumPy
· GitHub repository

TECHNICAL SKILLS

Languages: Python, C/C++, Bash/shell, JavaScript, SQL
Frameworks: Django, Pandas, PyTorch, TensorFlow, Flask
Deployment: Git, AWS, Docker, Linux
Paradigms: Machine Learning, Digital Signal Processing, Writing

EDUCATION

NORTHWESTERN UNIVERSITY | Class of 2021 | B.A., Computer Science
Awards: Kaplan Humanities Scholars & Integrated Science Program, Northwestern DeFord Endowed Scholar, Computer Science TA Fall 2019, Dean's List Winter 2018 & Winter 2020
Organizations: IEEE Northwestern (Executive Board), NU Model United Nations (Committee Chair), Northwestern Philharmonia Orchestra (Principal Double Bassist)