

PAUL BOEHRINGER

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EDUCATION

Stanford University

M.S. in Statistics – Focus on Machine Learning & Artificial Intelligence – GPA: 3.6

Stanford, CA

Class of 2021

Pennsylvania State University – Schreyer Honors College

B.S. in Industrial Engineering – Math Minor – GPA: 3.9

University Park, PA

Class of 2019

PROFESSIONAL EXPERIENCES & INVOLVEMENT

SparkCognition Artificial Intelligence Solutions – Software Engineer

Austin, TX

Software engineer and data scientist creating production machine learning systems

2022 – 2023

- Built centralized exchange data collection with ClickHouse and Databricks for unified market API
- Boosted blockchain history processing speed by an order of magnitude with Apache Spark implementation
- Created and deployed interaction pipeline for PyTorch LLM based chatbot
 - Designed and documented social media scrapers for chatbot training data
 - Chatbot analyzed live social media feeds using LLMs to monitor sentiment regarding exchange solvency

Algos Algorithmic – Co-Founder & Data Scientist

Philadelphia, PA

Created proprietary neural network based trading algorithm

2021 – 2022

- Samples are publicly available in the [algos](#) repository on my personal GitHub account
- Implemented data pipeline and engineering for collection, management, analysis, and ordering on four exchanges
- Reacquired complete rights following SparkCognition's discontinuation of its financial services

Balyasny Asset Management – Data Intelligence Group Intern

Chicago, IL

Merged two back testers enabling seamless comparisons for portfolio managers

Summer 2020

- Created signal research back testing guide for testing new machine learning based portfolios
- Established data pipeline for back testing and refactored to deliver optimized responses to invalid requests
- Enhanced the backtest process, achieving a 100x speed increase for several frequently-requested metrics

Deloitte Consulting – Technology Intern

Pittsburgh, PA

Strategy and Analytics Consultant for a Medicare data processing project

Summer 2018

- Wrote ad hoc SQL and stored procedures for the State of Kentucky's integrated eligibility program
- Contributed standard operating procedures for Deloitte's Big Data Solutions Playbook

News Reliability Research Sponsored by Booz Allen Hamilton – Academia Research

State College, PA

Built a natural language processing (NLP) algorithm to predict a reputation rating for new pieces

Spring 2018

- Tokenized articles, processed them, and built a language model to output reliability of an article
- Created a Google Chrome extension to display the trust score of articles on webpages

Financial Network Failure Propagation Research – Academia Research

State College, PA

Investigated how financial network structure plays a role in an organization's risk of bankruptcy

Spring 2018

- Modeled historical financial crises via adjacency matrices to identify liability structures for future risk mitigation

FIRST FRC Team 1218 Vulcan Robotics

Philadelphia, PA

Volunteer mentor for 2018 world champion's mechanical and computer aided design teams

2012 – present

- Placed 7th in 2014 and 5th in 2015 at FRC at World Championship while high school team captain

SKILLS

- Python
- NLP / LLMs
- Databricks
- ETL / pipelines
- NoSQL (MongoDB / Redis)
- Machine Learning
- AWS / Azure / GCP
- Hadoop / Apache Spark
- PyTorch
- SQL
- Git
- ClickHouse
- Docker / Kubernetes
- Linux Admin
- Blockchain
- APIs / Websockets