Robert (Rob) Netzke

Software Engineer

I am an experienced data scientist and software engineer, I am highly adaptable to new software frameworks, I am self-taught in many topics including: React, HTML, CSS, NodeJS, Bitcoin, and the Lightning Network, I lean into challenges, and I love working in a team

rob.netzke@gmail.com

858-761-4749



San Diego

in linkedin.com/in/robert-netzke

WORK EXPERIENCE

Machine Learning Engineer (Jr) Viant Technologies

12/2021 - 08/2022

Irvine, CA

Up and coming ad-tech company

Tasks

- Program end-to-end deep-learning predictive models utilizing the keras functional api and tensorflow modules
- Build robust PyTorch sequence generation models by implementing transfer learning libraries such as OpenAI
- Leverage tools such as Google BigQuery, CLI, AI Platform, etc. to train models efficiently and asynchronously

Data and Modeling Intern

Arizona State University Enterprise Partners

04/2021 - 08/2021

Tempe, AZ

Portfolio managers of the ASU endowment

Tasks

- Perform regression analysis on ASU foundation's equity investments to quantify risk across various factors
- Utilize the Bloomberg Terminal and Bloomberg API to streamline factor and risk analysis with Excel + ipynb
- Analyze sector exposures and research macroeconomic trends to ensure tactical deployment of endowments

Undergraduate Student Instructor

EE/Computer Science Department, UC Berkeley

08/2020 - 01/2021

Achievements/Tasks

- Lecture on course concepts and assist students in solving conceptual and computational problems or questions
- Convey methods of data analytics to students including Nearest-Neighbor algorithms and hypothesis testing
- Develop student understanding of Python techniques by explaining basic to intermediate methods of coding

EDUCATION

BA, Applied Mathematics; BA, Data Science University of California, Berkeley

08/2017 - 08/2021

Cumulative GPA: 3.5

Courses

- Deep Learning
- Time Series
- Econometrics Computer Programming

SKILLS

Python Pandas **PyTorch** Google AI Platform HTML/CSS

PERSONAL PROJECTS

Ad-less News Web Application (12/2022 - Present)

- Search for news from thousands of publications using a keyword
- Introduce micropayments for news searches using the Strike API
- Built with React, NewsAPI, Strike API, tailwind CSS, and NodeJS

Option Arbitrage Algorithms (09/2022 - 10/2022)

- Research, understand, and implement option arbitrage algorithms
- Constrain all algorithms to have O(N) time and space complexity
- Discuss limitations of implementing such algorithms in real-time

Modeling and Exploration of Nuclear Binding Energies (08/2021 - 09/2021)

- Research the theory and implications of strongly bound nuclei
- Train a model to estimate binding energies for arbitrary nuclei
- Compile research, code, and findings into a comprehensive report

BOOKS

The Man Who Solved the Market

The life of Jim Simons, the greatest quant trader of all time

Flash Boys

On the not-so-moral ways some banks made money with fast information

Mastering the Lightning Network

A technical discussion of a layer two Bitcoin scaling solution. Involves internet protocol, encryption, game theory, and more nerdy topics

The Bitcoin Standard

A discussion of Austrian Economics, the history of money and associated policy, and the case for Bitcoin

INTERESTS

Football Diet and Health San Diego Padres **Austrian Economics** Options Trading Competitive Gaming Weight Training and Calisthenics