

Nishk Patel

nishkdpatel@gmail.com | (609) 917-8701 | github.com/nishkp

Education

University of Illinois - Urbana Champaign

Expected May 2025

- Major: Computer Science & Statistics (**4.00 GPA**)
- Coursework: *Linear Algebra, Discrete Structures, Statistics Probability, Data Structures & Algorithms*

Experience

Software Engineer | Disruption Lab

February 2023 - Present

- Technical analysis of blockchain based verification systems, data analysis, visualizations, and architecture diagrams to produce proofs to ensure
- Creating asset management and verification system with privacy and scalability to over 1,000 potential clients
- Implementing ZK-Snarks with Circom for authentication and verifiable computation

Quantitative Researcher/Analyst | Quant

February 2023 - Present

- Quantitative Finance Research as a part of Illinois's leading student quant organization to harnesses the power of statistical learning theory to extract information from market, fundamental, analytical, and alternative data
- Working to create market trading strategies to establish strategies with ML algorithms with 40% profit margins

CNN Optimization| PURE Undergraduate Research

September 2022 - December 2022

- Led team in generating optimized dimension choices for a Convolutional Neural Network with over 200 combined hours of contribution
- Established machine learning model with 92.8% accuracy training over CIFAR-10 dataset after researching kernel size subsampling and adaptive learning rates
- Awarded 1st place during research symposium for audience choice amongst peers and professors

Chief Technology Officer | Youth For Business

February 2021 - November 2021

- Responsible for the creation of the Youth for Business Website; Skilled with HTML, CSS, and usage of Bootstrap
- Installed and executed digital advertising campaigns and strategies in order to gain more exposure and outreach to over 750+ engaged students with \$2,000 dollars of investment

Projects

Options Analysis

February 2023

- Usage of R and Python to analyze options data provided by a strategy engine with the goal of reducing latency and increasing fill rate to optimize order manager usage
- Coded an AI model with 71% accuracy to predict the probability of orders being filled using specific parameters
- Created a multitude of visualizations in R and Matplotlib to demonstrate importance of premium to market size

Hack TCNJ - Best Google Cloud Implementation

April 2022

- "Joyscore" analyzes users emotions at frequent intervals by implementing Vision AI and determines a sentiment score to aid in better advertising suggestions
- Granted over \$400 worth of Google Cloud Credits to continue project and ensure complete establishment
- Utilized OpenCV and implemented a camera integration into the program; Youtube API generated video length to determine snapshot frequency and Google Cloud's Vision AI API implemented to generate sentiment reports

Leadership and Volunteering

Eagle Scout | Boy Scouts of America

September 2013 - September 2022

- Organized and developed a community service projects; Lead volunteers through 300+ hours of service

President | National Honor Society

June 2021 - June 2022

- Developed an 82 hours per week tutoring program for all grades & subjects in the district; Guided 200 students through volunteering and leadership programs provided by the school

Skills

Languages: Python, Java, C++, R, HTML/CSS

Libraries: PySpark, Tensorflow, Matplotlib, OpenCV, ReactJS, React Native