

Pratim Chowdhary

I am currently a senior attending Jericho High School in Jericho, NY interested in mathematics and Computer Science, with machine learning/artificial intelligence being my career focus. I strive to use technology to make the world a safer place.

EXPERIENCE

CEO and Manager, 1518 Capital — Jericho, NY

February 2020 - Present

- Working on algorithmic trading strategies for US equities.
- Heavy use of data streaming pipelines and machine learning tools including: Tensorflow, SkLearn, Apache Spark, Reinforcement Learning, Feature Engineering, Genetic Programming, Symbolic Regression, Optimization Algorithms.
- Strong knowledge of financial markets and statistical analysis.

Founder and President, eHacks — International

May 2020 - Present

- Organized two virtual hackathons in the summer and fall of 2020
- 250+ participants and tens of thousands dollars in sponsorships.
- Coordinated with industry professionals to host workshops and mentor the participants.

Code Coach, Coder School — Syosset, NY

July 2020 - January 2021

- Managed computer science and mathematics camps.
- Languages taught: Python, Scratch, HTML, CSS, JavaScript, Java, AutoCAD.
- Assisted sales team in pitching to prospective clients.

Lead Web Developer, Scriptopic — United States

July 2020 - June 2021

- Lead Web developer of Scripts social media platform Scriptopic (currently in development).
- Hosting over 1700 members and have over 2000 followers
- Backend Development: Flask, Apache, Node, SQL, PyTest, GraphQL

Personal Tutor, PC Private Tutoring — Jericho, NY

March 2016 - Present

- Taught classes for various programming languages including: Python, HTML, CSS, Scratch, Java.
- Taught core subjects including: Mathematics, the Natural Sciences, and SAT practice.

President, Coders Organization — Jericho High School

May 2020 - June 2021

- Led the Jericho Coding Organization with over 50 members to victories in multiple competitions, including: ASCL, Hackathons, CMIMC

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SKILLS

Strong knowledge of Python, JS, HTML, CSS +, C++, Java, AWS, Docker, Git, SQL

Learning Machine learning and Data Science: Tensorflow, Reinforcement Learning, Unsupervised Clustering, etc.

Strong Public Speaking and Presentation skills

Mathematics Skills (Multivariable Calculus and Linear Algebra + College Level Physics)

EDUCATION

Dartmouth College, Hanover NH
— Incoming Freshman Studying Computer and Data Science

Jericho High School, Jericho NY —
Advanced Regents Diploma

Gifted School of Creative Problem Solving, SUNY University — 9th Grade Student

AWARDS

New York Math Fair: Gold Medal
for paper on the possible exploitation of RSA encryption

WRO New York: 1st place in WRO regional New York competition

Teen Hacks LI: Most Popular Hack at Teen Hacks LI

Technight: 3rd Place at Brooklyn Technight

Adelphi: 2nd place in Adelphi Robotics Competition

College Board: Advanced Placement National Scholar

PROJECTS

<https://github.com/cpratim>

Data Science and Machine Learning

- **AI Basketball Betting** (<https://github.com/cpratim/Basketball-Betting>)
 - Languages: Python
 - Bet on basketball Odds (Over Under, Money Line) using previous games statistics and player data
 - Skills: Deep Learning, Feature Engineering, Large Data Processing, Pandas, SkLearn, Tensorflow
- **Feature Extractor** (https://github.com/cpratim/feature_extractor)
 - Languages: Python
 - Automatically generates correlated features from raw data sets using the Pearson Correlation Coefficient as a metric.
 - Skills: Big Data Processing, Genetic Programming
- **Convolutional Trader** (<https://github.com/cpratim/trans-conv-net>)
 - Languages: Python, Pickle
 - Process Buy and Short signals for Airline stocks based on convolutional neural networks with feature images generated from time series genetic extraction.
 - Skills: Data Engineering, Feature Extraction, Deep Learning, Genetic Programming, SkLearn
- **Image Layering Trader** (https://github.com/cpratim/cnn_trader)
 - Languages: Python, Pickle
 - Generating Buy/Sell signals based on neural network classification of 15x15 RGB images layered with stock features
 - Skills: Deep Learning, Feature Engineering, Convolutional Neural Networks, Statistical Analysis

Web Development

- **BitShare** (<https://github.com/cpratim/bitshare>)
 - Languages: JS, HTML, CSS, SQL, Python,
 - Platform where artists can share their music and be paid via crypto currency mining on the user's computers.
 - Skills: Web Development, Backend Frameworks, SQL and Databasing, AWS, Cryptocurrency
- **SmartBus** (<https://github.com/cpratim/lexus-eco>)
 - Languages: Python, HTML, CSS, SQL, JS
 - Bussing Platform for schools which allow students to communicate with their drivers as to their method of commute, lowering carbon emissions by stopping unnecessary bus stops.
 - Skills: Web Development, Backend Frameworks, SQL and Databasing, AWS, Docker
- **SecureCloud** (<https://github.com/cpratim/securecloud>)
 - Languages: Python, HTML, CSS, JS
 - Storage web server similar to that of google drive created from scratch with a user interface and CLI interface
 - Skills: HTTP Requests, Backend Frameworks, Large Scale Architecture, AWS
- **Music Player** (<https://github.com/cpratim/music-player>)
 - Languages: Python, HTML, CSS, SQL, JS
 - Simple Music Player with playlist functionality created using a Flask backend and Javascript controls.
 - Skills: ReactJS, JSON, Backend Frameworks

Miscellaneous

- **Transmission** (<https://github.com/cpratim/transmission>)
 - Languages: Python
 - Transfer files and folders automatically between multiple desktops using a centralized storage web server
 - Skills: Sockets and Networking, HTTP Requests, CLI Based Applications, Backend Development
- **Discoin** (<https://github.com/cpratim/discoin>)
 - Languages: Python
 - Currency Bot for the popular chatting service Discord, allowing users to transact virtual currency over chat rooms
 - Skills: Asynchronous Event Management, User based Architecture, Socket Based API
- **Stock Trading Bot** (<https://github.com/cpratim/Stonk-Bot-Discord>)
 - Languages: Python
 - Fake trading stocks based on real time market data over Discord chat rooms
 - Skills: Asynchronous Event Management, Realtime API Management and Backlogging, Socket Based API