Chinmay Tyagi

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EDUCATION

University of California, Irvine Sept 2017 – June 2021
BS in Computer Science

Relevant Coursework

CS 178: Machine Learning
CS 116: Computer Vision
CS 53: System Design and Operating Systems
CS 163: Graph Algorithms
Math 130 Series: Stochastic Processes
Math 13: Abstract Mathematics

Activities: Hedge Fund Society (Board Member), Sigma Pi Fraternity

WORK EXPERIENCE

Software Engineering Intern @ Intel, Visual Cloud – Hillsboro, OR June 2020 – Dec 2020

Developed a solution for volumetric VOD streaming, resulting in 31% bandwidth savings
My work was published in the 2021 International Broadcasting Conference
Whitepaper: www.intel.com/content/dam/www/public/us/en/documents/white-papers/volumetric-vod-white-paper.pdf
Filed innovation paper for adaptive bitrate streaming on 3D data (patent under review)

Teaching Assistant, Discrete Math @ UCI – Irvine, CA Mar 2020 – Dec 2020

Taught course material in weekly discussions and independently held office hours

Software Engineering Intern @ Ascendo AI – San Francisco, CA June 2019 – Aug 2019

Designed and built an Android app for customers to access core services of the company
Implemented two-factor authentication and integrated app with ML-based backend

Summer Analyst @ Science Philanthropy Alliance – Palo Alto, CA June 2018 – Sept 2018

Managed a Salesforce CRM for a $30 million portfolio
Tracked client analytics using Tableau; Analyzed and presented findings weekly to increase donation rate

RESEARCH

UC Irvine Intelligent Dynamics Lab Dec 2020 – Current

Working on research in reinforcement learning in application to game theory

UC Irvine Center for Machine Learning Oct 2018 – March 2019

Assisted Prof. Pierre Baldi in research on predicting human behavior based on brain activity
Transformed a dataset of brain signals into a time series regression model via Fourier analysis

Stanford Artificial Intelligence Lab June 2017 – Aug 2017

Created a model to predict behavior of collisions between rigid-body systems
My work was used in a paper published in the 2018 International Symposium on Experimental Robotics
https://link.springer.com/chapter/10.1007/978-3-030-33950-0_37

SKILLS & PROJECTS

Programming Languages: Python, C/C++/C#, R, Java, JavaScript
Other: Linux, Docker, AWS, Unity, Tableau, Latex

Artificial Art with Neural Style Transfer

Built a convolutional neural network using Tensorflow to paint any image into artwork
Ex: "Picasso-ify" a selfie of myself by transferring the style of one of his paintings

Trading Algorithm using Mean Reversion

Developed an algorithm which determines stocks to short based on premarket activity
Program scrapes indicators and feeds data into random forest classifier with a win/loss ratio of 2 to 1

Checkers AI

Wrote an algorithm to play checkers against CPUs of various difficulty levels
Utilized alpha-beta pruning to look ahead for the best possible move
Created several heuristic functions to evaluate the score of a player, and to calculate the best move

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Extracurriculars: Eagle Scout, Club Soccer, Poker
Status: U.S. Citizen