Justin Huang

SOFTWARE DEVELOPER

1932 Glenwold Drive, Paoli, PA 19301

(610) 504-0446 | justinhuang496@gmail.com | xinging-birds | justinhuang496

Education

The Pennsylvania State University — Schreyer Honors College *University Park*

COLLEGE OF ENGINEERING *August 2019 - May 2023*

- **GPA:** 3.98/4.00
- **Majors:** B.S. in Computer Science and Statistics
- **Current Coursework:** Data Structures and Algorithms, Stochastic Modeling, Regression, Topics in Mathematics with Applications in Finance (MIT OCW)
- **Past Coursework:** Deep Learning Algorithms and Analysis, Probability, Honors Linear Algebra, Honors Vector Calculus

Skills

Languages Python, R, Java, JavaScript, C#, SQL

Frameworks Flask, Jupyter Notebooks, NumPy, Pandas, PyTorch

Tools Git, LaTeX, Linux, Illustrator, Excel

Interests Graphic Design, eSports, Ricing, Guzheng

Experience

Blockchain@PSU *State College, PA*

HEAD OF EDUCATION *September 2019 - Present*

- Taught and drafted curriculum for entry-level weekly workshop in JavaScript and Solidity teaching the foundational theory of blockchains and smart contracts, using template code and a GitHub repository to help students understand and refer to past material, concepts, and projects
- Designed new workshops and marketing material to drive engagement in educational sessions and other organizational events, including a case competition

Deacom, Inc *Chesterbrook, PA*

SOFTWARE DEVELOPMENT INTERN *May 2019 - June 2019*

- Updated and debugged training ERP platform repository in C# for new hires and interns, implementing common version control practices and proper code style
- Shadowed developers and learned workflow in maintaining work product through debugging, running unit tests and fulfilling customer needs

SAP America *Newtown Square, PA*

CENTER OF EXCELLENCE INTERN *June 2018 - August 2018*

- Created proof-of-concept stock price projection skill using R backend, funneled through SAP HANA and AWS Lambda, and accepting input through an Alexa skill
- Developed and taught machine learning support vector regression component in R to high school students for a week, using Agile to maintain communication

Projects

Kowalski *Finance*

SIDE PROJECT *August 2020 - Present*

- Finds financial information from Yahoo Finance—including price history, financial statements and common technicals—and displays information as text and images through a Discord bot responding to user commands, with constant uptime
- Requests information through Python interface to Discord API, obtained by scraping site source code, with changes pushed to Heroku using Git

Multigrid Neural Network and Convolutional Neural Network *Deep Learning*

CLASS PROJECT (DEEP LEARNING ALGORITHMS AND ANALYSIS) *May 2020 - June 2020*

- Classifies images in CIFAR10 dataset using supervised learning, implemented with both a convolutional neural network (CNN) or multigrid neural network (MgNet)
- Builds both neural networks with Python and PyTorch, run in a Jupyter Notebook environment on Google Colaboratory

Value-at-Risk Model *Finance*

SIDE PROJECT *February 2020*

- Calculates next-day value-at-risk (worst-case portfolio loss) using Python, tuned at a certain confidence level, using historical data and/or variance-covariance
- Utilizes Monte-Carlo simulations to project value-at-risk further into the future—next week, month, et cetera

Stock Price Predictor *Machine Learning*

INTERNSHIP PROJECT *June 2018 - August 2018*

- Creates stock price predictions as a proof-of-concept Alexa Skill, written in R, SAP HANA, and NodeJS
- Implements support vector regression to create predictions minimizing the mean-square error, run results in HANA and connect to the skill through AWS Lambda