**Andrew Ng**

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City, State and Zip

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**EDUCATION**

**University of Pennsylvania,** *School of Engineering* *and Applied Sciences* | Philadelphia, PA Aug 2021 – May 2025

*Major:* Systems Science and Engineering| *Minor: Data Science,* Statistics, and Mathematics

*Major (or Concentration) GPA:* 3.82/4.00 | *Cumulative GPA:* 3.74/4.00

*Relevant Coursework*: Programming Languages and Techniques I, Linear Algebra, Micro/Macro Economics, Engineering Probability, Decision Models, Intro to Dynamical Systems, Signal and Information Processing, Big Data Analytics, Machine Learning for Embedded Systems

**EXPERIENCE**

**First Team Analytics**, Data Science Intern Apr 2023 – Present

* Built expected-goal chain (xG Chain) model that provides value to players that participate in a shot-ending sequence, to be added to data dashboards for NCAA Division One teams
* Collaborate with CEO and other NCAA coaches in determining further features to add into the dashboards

**Perelman School of Medicine**, Undergraduate ML Researcher Nov 2022 – Present

* Developed machine learning/deep learning model with medical imaging data for automated fatty liver disease diagnosis
* Model performance evaluated using Dice coefficient, and multivariate linear regression utilized to determine relationships

between muscle mass, age, and sex

**Daily Pennsylvanian**, Data Analytics Lead Jan 2022 – Present

* Leveraged Plotly and Dash to create company-wide data dashboard filled with useful, up-to-day performance metrics
* Used Google Analytics to automate analytic reports for the company using data visualization

**PROJECTS**

**Cancer Classification** 2023 – Present

* Determined the likelihood of cancer given a genetic profile by implementing a robust KNN classifier
* Varied neighbor types by individual, applied graph fourier transforms and network analysis to improve the model classification
* Used genetic network dataset from NCI Nature database, which consists of a network of 2458 genes

**Predicting Article Success** 2023 – Present

* Built a deep-learning model using topic modeling, word count, publish year, and other metrics as features to generate predicted number pageviews for a given article
* Collected/Pre-processed necessary data from Google Analytics (article header, description, category, etc.)

**Facial Recognition Algorithm** 2023 – Present

* Implemented principal component analysis algorithm to perform facial recognition
* Images were digitized, covariance matrix was computed, then projected on a new principal component basis before being classified via KNN classifier
* Used Image dataset from AT&T Laboratories Cambridge, which comprised of 10 images for each of 40 distinct people

**LEADERSHIP**

**Penn Compose,** Executive Board Member Sept 2022 – present

* Assemble biweekly open music composition workshops for club
* Organize and perform at end-of-semester concert, consisting of jazz, classical, and contemporary compositions

**Penn Pickup Soccer Board**, *Vice President* | Philadelphia, PA Oct 2021 – present

* Coordinate weekly pickup soccer games through GroupMe
* Organize 6v6 tournament for Penn undergraduates that donated all proceeds to local Philly community charities

**SKILLS & INTERESTS**

*Technical:* Python (Pandas, NumPy, Scikit-Learn, PyTorch, TensorFlow, Google JAX, CVXPy, Keras, SciPy)*;* Java*;* JavaScript; OCaml; SolidWorks; Fusion 360; MS Word; MS Excel; MS PowerPoint); Google Analytics; Plotly, Dash; SQL, Tableau; Spark; AWS

*Language:* English (fluent); Spanish (beginner); Korean (beginner)

*Hobbies*: Piano; Cello; Guitar; Soccer; Basketball; Golf; Tennis; Football; Hiking; Food