

CHRISTOPHER DENQ

SUMMARY

Data scientist with **1.5+ YoE** in big data analytics, machine learning, and database engineering. Unique background in **art market** confers better data-driven storytelling and strong understanding of data impact within business environments. **Avid self-learner** and **serial project-builder** who strives to constantly grow, **empower others**, and add value back to the world.

EDUCATION

Foothill College Los Altos Hills, CA
Associates of Science, Double Major in Mathematics and Computer Science Present

- **Course Topics:** Cloud Computing, Statistics/Probability, Linear Algebra, Multivariate Calculus, OOP Programming

University of Pennsylvania, School of Engineering and Applied Sciences, College of Arts and Sciences Philadelphia, PA
Certificate in Data Analytics and Visualization March 2022
Bachelor of Arts, Double Major in Philosophy and Art History May 2021

- **Honors:** John C. Parker Fellowship, 2016 (\$500 for statistical research in game theory)
- **Course Topics:** Machine Learning, Big Data Analytics, Database Management, Fullstack Development, Formal Logic

SELECTED PROJECTS (More on GitHub)

Full-Stack Machine Learning Dashboard: Mushroom Edibility Predictor March 2022
Python (SKLearn, Flask, Matplotlib), HTML/CSS/JS github.com/cdenq/mushroom-edibility-predictor-web-app

- Full-stack web app that utilizes mushroom data to predict edibility of mushrooms with user inputted features
- Trained 7 ML models on 60k+ data points to predict its edibility to within 80-99% accuracy, created 8 EDA graphs
- Created 1 front-end webapp (3 pages); presented findings and creation process to 3 Penn faculty/staff and 20+ students

Full-Stack Interactive Web Dashboard: Market Metrics on Video Game Industry January 2022
Python (Flask), MongoDB, HTML/CSS/JavaScript github.com/cdenq/video-game-performance-scraper-and-web-dashboard

- Full-stack web app that scraped market metrics on the video game industry and visualized on dashboard
- Analyzed 10k data points, maintained 5 MongoDB collections, created 19 visualizations
- Created 1 web app, 2 webpages, 1 report and 13 slides; presented findings to 3 Penn faculty/staff and 20+ students

RELEVANT EXPERIENCE

California State University: Northridge, College of Engineering and Computer Science Northridge, CA
Machine Learning Research Assistant November 2021 – Present

- Researching graduate-level machine learning material, creating 4+ class slide decks, 10+ Python examples to demonstrate ML concepts, assisting in general class material preparation, proofreading, documentation for Professor Wen-chin Hsu
- **Succeeding** in applying abstract ML and statistical material to Python code and slide decks for graduate-level course

Freelance/Volunteer Computer Science Tutor: Penn LPS, CSUN, Code.org, Wyzant.com, Local Various
Data Science Tutor, COMP542 Tutor, Python Course Teacher, AP Computer Science Tutor September 2021 – Present

- Taught computer science topics to 25+ high school, college, and adult learners for total 65+ hours ranging from coding fundamentals to advanced data structures and algorithms to machine learning topics
- **Succeeded** in adapting teaching style, clearly communicating abstract computer science concepts, mentoring students

Oasis Commissary (Non-Profit), University of Pennsylvania Philadelphia, PA
Founder and Executive Business Operations Manager September 2016 – March 2020

- Wrote proposal to turn unused dormitory space into non-profit commissary, obtained vendor license from Philadelphia city
- Managed 21 staff and 2 junior managers, \$2000 bi-monthly budget, 6 marketing campaigns, 2 training programs
- **Succeeded** in serving local college dorm for 3 years: \$1300 gross (returned to Penn), 22k purchases, 180 unique clients

SKILLS AND FRAMEWORKS

- **Languages:** Python, Java, R, SQL (PostgreSQL), NoSQL (MongoDB), HTML/CSS/JS
- **Libraries/Frameworks:** SKLearn, Keras, TensorFlow, PyTorch, Pandas, Numpy, Matplotlib, Seaborn
- **Cloud Tools:** AWS (Sagemaker, S3, RDB), Hadoop/Spark, Docker, GCP Cloud Run, Google Collab, Git
- **Visualization Tools:** Tableau, Excel/VBA, Google Sheets/Google Apps Script
- **Miscellaneous:** Agile (Scrum), APIs, web scraping

HOBBIES

Sudoku • Chess • Riddles • Escape Rooms • Resource-Management Boardgames