# Dawna Cho

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#### **EDUCATION**

### University of California, San Diego | La Jolla, CA

B.A. - Cognitive Science specializing in Machine Learning and Neural Computation

**Coursework:** Data Structures And Object Oriented Programming, Machine Learning, Data Science, Software Tools and Techniques, Discrete Mathemathematics, Differential Equations, Probability, Linear Algebra

### **SKILLS & TECHNICAL TOOLS**

Languages: Java, Python, C, MATLAB, HTML/CSS, JavaScript, Solidity

**Technologies:** Git, Linux, Jupyter Notebook, scikit-learn, ReactJS, Pytorch, Pandas, Matplotlib, Seaborn

#### **EXPERIENCE**

## Website and Smart Contract Developer | Edan Artden LLC

*September 2021 - June 2022* 

- Designed and built an open-source blockchain-based web application platform for users to mint digital assets on OpenSea. (HTML, CSS, ReactJS)
- Developed a functional ERC-721 smart contract and continuously enhanced security on a decentralized system to ensure safe transfers within the seller and buyer. (Solidity)

## STEM Instructor | KidzToPros

February 2023 - Present

• Provide STEM-based courses using Python, Scratch Coding, robotics, and digital art for 10+ students, explaining concepts (recursion, physics, algorithmic complexity), guiding debugging processes, and clarifying project questions.

## Math and Computer Science Tutor | CNUSD & Private

June 2016 - January 2020

- Taught students the fundamentals of programming, problem solving, and algorithm design in a 12-week Java-based program by using a personalized project-based approach to guide students through building their own applications.
- Responsible for leading one on one lessons with students from grades 1st to 12th and providing individualized help in learning and understanding new concepts.

### **PROJECTS**

## Click Bait | Python, Seaborn, Pandas

• Utilized VADER sentiment analysis to evaluate the sentiment of news articles on hate crimes acquired through a media API and facilitated data wrangling and cleaning.

### GalaxAI | Python, Seaborn, Pandas

• Implemented Machine Learning models including Logistic Regression, Support Vector Machine, K Nearest Neighbors, and Decision Trees to classify astronomical objects, based on their stellar characteristics.

### **Enhancing Learning** | Python, Seaborn, Pandas

• Employed Principal Component Analysis (PCA) and K-means clustering algorithms to process multidimensional data points obtained from actual student feedback on the course.

## Labyrinth Navigator | Java

• Implemented and devised an algorithmic search approach, leveraging two distinct data structures, namely a Stack and a Queue, to solve a maze map with obstacles, a starting point, and a destination.

### Needles in a HayStack | Java

• Devised a method for enabling users to create their own filtering criteria within a file system, utilizing HashMap data structure and amortized analysis to achieve optimal efficiency on a specific big-O bound.

#### **mnist** | *Python*, *Pytorch*

• Implemented a simple feedforward neural network using PyTorch to classify handwritten digits from the MNIST dataset into their respective classes (0-9).

## **AWARDS**

### **NCWIT Inland Empire 2018 Affiliate Winner**

- Won the NCWIT Inland Empire Affiliate Award that honors women in STEM
- Demonstrated a STEM portfolio of computing in Java experiences, game designs, 3-D animations, and leadership