

Juan Castillo

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EDUCATION

COLUMBIA UNIVERSITY

BS IN COMPUTER SCIENCE

Aug.2023 - May.2027

School of Engineering and Science

LINKS

LinkedIn:

www.linkedin.com/in/juan-castillo1

GitHub:

www.github.com/juancastillo346

COURSEWORK

Advanced Programming

Data Structures

Discrete Mathematics

Multivariable Calculus

Introduction to Java

Introduction to Computing

SKILLS

PROGRAMMING

Proficient:

Java • Python • C

Competent:

JavaScript • C# • SQL

Familiar:

C++

TECHNOLOGIES

Testing:

JUnit

Container Services:

Docker

JavaScript Libraries & Frameworks:

React

Miscellaneous:

Flask • Spring

Git • GitHub

Visual Studio Code • JSON

EXPERIENCE

UNIVERSITY OF HOUSTON | COURSE INSTRUCTOR

May 2023 - Aug 2023

- Designed and delivered a dynamic "Introduction to Computer Science" curriculum to 150 students, leveraging a variety of teaching techniques to accommodate diverse learning styles.
- Collaborated with 6 fellow instructors and the Head of the STEM Department to innovate curriculum development and assessment strategies, enhancing educational outcomes.
- Provided mentorship and guidance to 50 students, advising them on academic and career objectives, and fostering their professional growth and development.

PROJECTS

PASSWORD MANAGER

GUI-based password manager for secure storage and management of encrypted passwords.

- Developed a user-friendly GUI in WPF and XAML for managing and encrypting passwords, providing an intuitive interface for adding, editing, and retrieving stored credentials.
- Implemented SQL encryption techniques to securely store and encrypt passwords in a SQL backend, ensuring data integrity and protection.
- Designed and integrated a backend to handle encrypted password data storage and retrieval through Visual Studio.

NEURAL NETWORK

Neural network for handwritten digit recognition

- Engineered a Python-based neural network solution, honed for the MNIST dataset, that accurately discerned handwritten digits with an initial accuracy of 85%, showcasing deep learning and pattern recognition capabilities.
- Implemented forward and backward propagation algorithms to optimize the neural network's weights and biases, enhancing model training efficiency over successive iterations.

WEATHER APP

Web application that retrieves and displays real-time weather statistics

- Designed and implemented a responsive weather application using HTML5, CSS3, and JavaScript, integrating OpenWeatherMap API for live weather updates, showcasing skills in front-end development and API integration

WEB SCRAPER

Java web application that scrapes stock prices from financial websites

- Utilized Jsoup, a Java HTML parser, to automate data extraction from a historical snapshot of the Telegraph's financial index webpage, demonstrating skills in web scraping and data parsing.

ACTIVITIES

Society of Hispanic Professional Engineers - Member

ColorStack - Member