John Doe

Senior Bioengineering student, specialized in Machine Learning and Artificial Intelligence

EDUCATION

•Bioengineering - Senior year (85%)

University

 $2020 \hbox{-} ongoing \\ {\rm CGPA:}\ 3.46/4.00$

•Friends of Fulbright Exchange program

An American University

Spring 2024 Completed

EXPERIENCE

•Applied AI Engineering Internship

Dec 2024 - Present day

- Helped develop AI powered automations for optimising customer support related processes
- Provided tailored support for our clients, with a customer-facing approach
- Skills involved: Typescript, git, GitHub, API management, unit testing, prompt engineering, sprint planning

•Vice president at the IEEE EMBS Student Chapter

Aug 2022 - July 2024

- Vice President for the IEEE Engineering in Medicine and Biology Society student chapter at University
- Collaborated with international student chapters, as well as multinational health and biotech companies
- Skills involved: team leading, event planning

•Teaching assistant

Aug 2021 - Present day

- Assisted in teaching classes in Introduction to Informatics and Data Structures and Algorithms, designed and graded assignments and exams
- Became proficient in Python programming, source control, and public speaking

Personal Projects

•Interactive mechanical ventilation simulator

Awarded a special mention at a physiology conference 2023

- Models lung response under a wide range of stimuli and experimental conditions
- Runs on a self-implemented Runge-Kutta 4 based differential equation solver engine
- Technologies: Python, NumPy, TKinter

•Real-time seizure detection

A machine learning model to detect seizure events in real time based on EEG analysis

- Uses support vector machine to classify short multichannel signal segments
- Performs spatial, statistical, and Fourier analysis
- Technologies: Python, NumPy, Scikit-learn, SciPy

•Semi-automatic nuchal translucency measurement

An objective, user independent algorithm to measure nuchal translucency in ultrasound fetal scan

- Deep learning based image segmentation, combined with generalized linear regression models
- Technologies: Python, NumPy, OpenCV, SITK, Keras

TECHNICAL SKILLS AND INTERESTS

Languages: Spanish (native), English (proficient), French (intermediate)

Programming Languages: C, Python, MATLAB, Arduino, Typescript

Libraries: Numpy, Matplotlib, Jupyter, Scipy, Pandas, sklearn, OpenCV, PyTorch

Tools: VS Code, Git, GitHub, Linux, Trello, MS Office, Siemens NX, SolidWorks, mySql, LATFX

Fields of Interest: ML, AI, Deep Learning, Computational Modeling, Signal Processing, Computer Vision

Soft Skills: Autodidact, Adaptability, Agile methodology, Scrum framework

CERTIFICATIONS

•MITx Machine Learning with Python: From Linear Models to Deep Learning	2024
•MITx Introduction to Computer Science and Programming Using Python	2022
•Cambridge Certificate of Proficiency in English (CPE)	2019
•International Baccalaureate (IB)	2019
•High School Head Pupil and Valedictorian	2019