Jose Fernandez-Rocha

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EDUCATION

University of California, Berkeley, CA   **May 2024**
Bachelor of Arts in Data Science (B.A.)

Relevant Coursework: Structure and Interpretation of Computer Programs, Data Structures, Designing Information Devices and Systems I & II, Discrete Mathematics and Probability Theory, Efficient Algorithms and Intractable Problems, Principles & Techniques of Data Science, Probability for Data Science, Intro to Artificial Intelligence, Data Mining & Analytics, Industrial & Commercial Data Systems, Introduction to Machine Learning, Data Engineering

SKILLS

Languages: Python, C#, Java, JavaScript, ReactJS, Swift, HTML5, CSS, TypeScript
Libraries & Frameworks: NumPy, Matplotlib, Pandas, Bootstrap5, PyTorch, HuggingFace
Databases: MongoDB, SQL, NoSQL, PostgreSQL

HIGHLIGHTED PROJECTS & EXPERIENCE

SMA Inc.   **June - August 2021**
Software Engineering Intern   *Irvine, CA*
- Developed a Microsoft Project add-in with over 20 functions, boosting project efficiency by 50% through exclusive features.
- Collaborated cross-functionally, employing C# and API for seamless integration.

Digit Neural Network Classifier   **Fall 2023**
CS188: Intro to Artificial Intelligence - UC Berkeley
- Developed a neural network for digit classification, handling variable-length inputs, including a Language Identification model with recurrent neural network architecture.
- Implemented perceptron and neural network models, achieving >97.5% accurate on digit classification through backpropagation and training techniques.

Spotify Machine Learning Project   **Fall 2023**
Data144: Data Mining Analytics – UC Berkeley
- On team of 4, designed comprehensive preprocessing of a Spotify user dataset, transforming 20 columns by mapping categorical entries, standardizing ratings, and employing one-hot encoding
- Conducted decision tree analysis, exploring user features' impact on premium subscription, proposing actionable recommendations based on validated findings compared with K-Means clustering results.

Sooth.fyi   **May 2024 - Present**
ML Engineering Intern   *Remote*
- Created an LLM model using the HuggingFace libary, pytorch & NLP that outputs an articles media bias rating
- Developed a semantic search algorithm to match articles across different media bias categories, enhancing user access to diverse perspectives.
- Designed a pipeline for producing daily and weekly news summaries, including data collection, topic categorization, and summary generation, optimizing the presentation of news across various topics.

Multiplur   **June 2024 - Present**
Founding Game Developer   *Remote*
- Developed and optimized web & mobile Phaser 3 games, integrating Multiplur's AI for game state management, design, sprite handling, and user interface enhancements across devices

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

Berkeley ANova   **January 2022 – May 2024**
CS Mentor & Educator, Curriculum Committee Officer, Site Leader
- Supported under-resourced, marginalized local schools, creating over 50 labs, slides, and interactive activities
- Managed 10+ members in my committee & led weekly sessions to more than 20 students in a partnered school