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
Libraries: NumPy, Matplotlib, Pandas, Bootstrap5, PyTorch
Databases: MongoDB, NoSQL, SQL

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.

Gitlet   **Spring 2022**
CS61B: Data Structures - UC Berkeley
- Developed Gitlet, a version-control system, involving over 1000 lines of code.
- Implemented key features like committing, checking out files/commits, viewing history, managing branches, and merging changes.

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.

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

Berkeley ANova   **January 2022 - Present**
CS Mentor & Educator, Curriculum Committee Officer, Site Leader
- Provide educational support to under-resourced schools across the Bay Area
- Created and remodeled over 50 labs, slide presentation and interactive activities
- Managed 10+ members in my committee with the curriculum used at each of our partnered schools
- Taught and led weekly sessions to more than 20 students in a partnered school