

Isaac Plotkin

Santa Cruz, CA | isaac.plotkin123@gmail.com | (925) 953-3739

Linkedin : www.linkedin.com/in/isaac-plotkin **IP** : www.isaacplotkin.com

EDUCATION

University of California, Santa Cruz

June 2022

Bachelor of Science in Computer Science, Minor in Statistics

Relevant Coursework: Applied Machine Learning, Introduction to Machine Learning, Linear Algebra, Data Structures and Algorithms, Analysis of Algorithms, Bayesian Inference, Probability and Statistics for Engineers, Vector Calculus, Computational Models

Study Abroad in Sorrento, Italy

Summer 2019

TECHNICAL SKILLS

Programming languages: Python, Java, C++

Additional Computer Skills: Github, TensorFlow/Keras, scikit-learn, PyTorch, Jupyter/Colab, SQL

PROJECTS

Synthetic Telepathy

Objective: To use subvocal recognition to enable synthetic telepathy.

- Created with the NeuroTechSC club.
- Used EMG to measure muscle activations.
- Applied a neural network classifier to recognize patterns from the EMG data.
- Classifier was inspired by the EEGNet research paper.
- Ongoing development and won first place at NeuroTechX competition.

NBA Playoffs Predictor

Objective: To create a classifier that predicts if an NBA team will make the playoffs given the team's offensive and defensive stats for the season.

- Implemented a neural network with two hidden layers using offensive and defensive data from 2015-2020 NBA seasons.
- Coded in Python, used TensorFlow/Keras, pandas, NumPy, and Matplotlib.

RELEVANT EXPERIENCE

UC Santa Cruz BSOE, Santa Cruz CA

June 2021-present

ML Research Assistant

- Research ways to enhance the fairness and accountability of machine learning models to better serve our society
- Read research papers on machine learning explainability and recourse.
- Developing ability to evaluate recourse for non linear models.

NeuroTechSC, Santa Cruz CA

March 2021-present

Machine Learning Team Member

- Create and enhance BCI machine learning models with a team of 3 other members.
- Read research papers on BCIs, EEG, and EMG.
- Project won first place at NeuroTechX competition.

UC Santa Cruz Loik Lab, Santa Cruz CA

January 2021- June 2021

Restoration Research Intern

- Collect and analyze data about plants.
- Research how plant functional traits and phylogenetics inform ecological restoration.