Kevin Chen

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Education

University of California, Irvine **September 2018 - June 2022**
Bachelor of Science, Computer Science specialization in AI/Machine Learning
Bachelor of Science, Biology specialization in Neurobiology

Coursework

Neural Networks, Machine Learning, Data Structures, Operating Systems, Algorithm Analysis, Statistical Modeling

Experience

Undergraduate Research Assistant **June 2019 - Present**
UC Irvine - Department of Neurobiology and Behavior

- Researching how neuropsychiatric disorders affect brain connectivity using MRI imaging.
- Implementing an algorithm that determines the intrinsic connectivity of the brain by using the constrained spherical deconvolution tractography technique
- Working towards presenting findings in NeuroImage, the most prestigious MRI journal

HTML/CSS Frameworks Instructor **August 2020 - Present**
Santa Ana Unified School District - Santa Ana, California

- Introducing students to fundamentals of HTML, CSS, and additional frameworks, so that they can build a website

Mobile App Development Instructor **March 2019 - June 2019**
Carr Intermediate School - Santa Ana, California

- Educated youth about mobile app development and what makes a marketable application
- Aided in development of a mobile application that was presented at an exposition to real-world developers

Orange County Regional Science Olympiad Proctor **February 2019**
UC Irvine - Rowland Hall

- Initialized and proctored a new event named “Codebusters” which involves the decryption of enigmatic messages
- Maintained an environment that followed score reporting and competitive integrity guidelines

Projects

Semantic Segmentation in Minecraft **2020**

- Using Project Malmo, a platform designed for the research of artificial intelligence, to label and classify structures in Minecraft
- Implemented a supervised neural network classifier with stratified sampling to use as references for higher accuracy and efficiency

Constrained Spherical Deconvolution Tractography (CSD) **2019-2020**

- Reading MRI diffusion data in C and translating it into tessellations using the CSD technique to improve quality of brain imaging
- Implementation of a response function estimator using corpus callosum data
- Evaluation of diffusion tensors to develop the coefficients of the spherical harmonics

Feature Selection and Performance Validation on a Wine Dataset **2019**

- Implemented feature selection methods such as univariate selection, recursive feature elimination, and principal component analysis to classify wine by its chemical components
- Validated performance of the model using neural networks, random forest, and decision tree to compare the result

Skills and Certifications

Languages Python, C, C++, Java, R, HTML, CSS, mySQL, MIPS Assembly
Technologies Scikit, Numpy, Matplotlib, Bootstrap, Linux, OSX, Windows, Excel
Certifications Technical Support Fundamentals Course by Google, Coursera Credential