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Hidden Valley Lake, CA 95467

Francisco Sandoval

Education

University of California, Davis

Jun 2017

BS | Neurobiology, Physiology, and Behavior

Santa Rosa Junior College

May 2015

AS | Biology

Skills

Apparatus Sterilization
Reagent and Media Prep
Drosophila Population Maintenance
Light Microscopy
Precision Balance Measurements
Volumetric Glassware Measurements
Data Processing
Bilingual and Biliteracy in Spanish

HTML, CSS, JS, Python, R, Bash CLI
Neuroimaging
Machine Learning Frameworks
High Resolution Mass Spectroscopy
Liquid Chromatography Mass Spectroscopy
Solid Phase Extraction
UV-Vis IR Spectrometry
Micropipetting

Professional Experience

Staff Research Associate

Duties included quantitative and qualitative review of volumetric measurements for quality, pathology, and prediction accuracy. Image processing involved manual segmentation for regions of interest aided by auto-segmentation algorithms and tuned machine learning models. Volumetric regions were then correlated with dementia and pathological aging. Extracted methods from source documents for research studies.

**UC Davis, Imaging of
Dementia and Alzheimer's Lab**
2018-2021

Extraction Chemist

Preparation, extraction, and clean up of various environmental sample matrices using SPE, LCMS, and HRMS methods. Exercised independent judgment and discretion when working with unusual or complex sample matrices. Specialization in solid phase extraction (SPE), liquid chromatography mass spectroscopy (LCMS), high resolution mass spectroscopy (HRMS) extractions.

Vista Analytical Laboratory
2017 - 2018

Laboratory Technician Assistant

Maintained computer lab equipment and computer/calculator software. Maintained lab samples and specimens. Performed sample preparation, daily calibrations, and quality control experiments as needed. Maintained non-consignment laboratory supplies and chemical reagents.

SRJC Mrak Labs
2015

Projects

AAIC 2020

"Towards a Generalized Deep Learning Framework for Production Scale Segmentation of Brain Structures"

Conference Speaker
2020

CalSERVES AmeriCorps

ESL Mentor
2014

CMC3

"Fast Fourier Analysis of Debussy's Claire de Lune"

Conference Speaker
2013