Jordan Vieler

925-872-5822 | jordan@vieler.xyz | Austin, TX

WORK EXPERIENCE

Sonepar USA

April 2022 – September 2023

Applications Developer II

Remote

- Utilized Python ML libraries to perform association rules mining on customer data to generate product catalogue insights
- Implemented data preprocessing and cleaning pipelines in Python
- Designed and implementing machine learning pipelines in Azure
- Collaborated with stakeholders to understand business challenges and identify machine learning opportunities
- Communicated technical concepts to both technical and non-technical executive leaders
- Developed RESTful APIs with Flask and FastAPI to serve cloud deployed machine learning services
- Researched, developed, and demonstrated a novel 3D container packing heuristic to meet business needs
- Researched and validated approaches to customer wallet-share estimation
- Utilized dimensionality reduction techiques to visualize customer data

Eurofins Lancaster Laboratories Research Associate, Flow Cytometry

October 2020 - September 2021

South San Fransico, CA

- Performed high-dimensional immunophenotyping of primary human immune cells with spectral flow cytometry
- Conducted Fluorescence Activated Cell Sorting (FACS) on a variety of cell types
- Analyzed high-dimensional biological data with machine learning techniques
- Applied R to analysis of high-dimensional Flow Cytometry
- Processed and performed IHC staining of primary human cells for spectral flow cytometry
- Instructed scientists on the operation of flow cytometers, high-throughput samplers (HTS), and software
- Reviewed literature in Immunology, Cancer-Immunotherapy, Biotechnology, and Artificial Intelligence
- Performed system startup, QC, troubleshooting, and shutdown for 7 FACS instruments
- Utilized Electronic Laboratory Notebook (ELN) system to document and archive experimental results

UCSB Neuroscience Research Institute – Reese Lab

September 2019 – October 2020

Lab Assistant

Santa Barbara, CA

- Utilized MATLAB to simulate and compare retinal cell mosaics with spatial statistics to gain insight into developmental rules of cell types within the mouse retina
- Mined Sanger mouse genome database to locate variants of interest and cross-referenced results with eQTL data and literature
- Identified 16, alternatively spliced, candidate genes which may play a role in central nervous system development
- Performed immunostaining and quantification of whole-mount mouse retinas, imaged with flourescence microscopy
- Trained in mouse eye dissection and retinal extraction

PUBLICATIONS

Patrick W. Keeley, Mikayla C. Lebo, **Jordan D. Vieler**, Jason J. Kim, Ace J. St. John, and Benjamin E. Reese. "Interrelationships between Cellular Density, Mosaic Patterning, and Dendritic Coverage of VGluT3 Amacrine Cells". In: *Journal of Neuroscience* 41.1 (2021), pp. 103–117. ISSN: 0270-6474. DOI: 10.1523/JNEUROSCI.1027-20.2020

EDUCATION & CERTIFICATES

University of California, Santa Barbara

June 2020

B.S., Cell and Developmental Biology

Certificate in Technology Management

UCSB Men's Rowing Team — Oarsman

Certificates |Stanford Online - Machine Learning, Feb. 2021

Deeplearning.AI – Deep Learning Specialization, Jul. 2021

Nvidia Deep Learning Institute – Jetson Nano Fundementals, Sep. 2021

Databricks – Databricks Lakehouse Fundementals, Feb. 2023

SKILLS & PROJECTS

Technology | Linux, Unix Utils, Azure, Containerization (OCI, LXC), Networking, git, IATEX

Languages: Python, R, C, SQL, Bash, Lua, Rust, MATLAB

Libraries: NumPy, Pandas, Matplotlib, Pytorch, Tensorflow, Plotly, SKLearn, FastAPI, Flask

Laboratory | Flow Cytometry, FACS, HTS, Immunohistochemistry, Sterile Technique, Cell Culture, CRISPR, DNA & Protein Purification, Transfection, Transformation, PCR, Gel Electrophoresis, Bioinformatics

Projects | Hack Computer: Created a general purpose computer from NAND gate primitives

Taxonomic Identification with ResNet-18: Created RGB image representations of rRNA sequences

and utilized pre-trained ResNet-18 to predict sequence identity