

DYLAN CHIMA-SANCHEZ

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EDUCATION

University of California - Davis
MS, Computer Science

Sep 2021 - Mar 2024
GPA: 3.8

University of California - Berkeley
BA, Computer Science & Statistics

Aug 2017 - May 2021
GPA: 3.6

WORK EXPERIENCE

Software Engineering Intern - RAPIDS cuGraph
NVIDIA

Jan 2022 - Jun 2022, Jun 2023 - Sep 2023

- Accelerated graph algorithms used by data scientists by writing Python bindings for lower-level GPU-accelerated primitives
- Improved code coverage of tests and efficiency of internal testing suite with automated scripts
- Refactored testing suite to reduce CI runtime overhead by 25%
- Added features to a backend plugin, accelerating an external library's code by over 50x

NLP Research Intern
Dcipher Analytics

Jan 2021 - May 2021

- Built a pipeline for creating knowledge graphs to discover new information, performing literature reviews in Natural Language Processing and Graph Neural Networks and utilizing ideas from fundamental papers

HPC Research Intern
Lawrence Berkeley National Laboratory

Jan 2020 - May 2020

- Trained convolutional autoencoders to extract seismic wave probabilities from geophysical images
- Performed inference on hundreds of gigabytes of data using parallel HPC

Web Development Intern
Sacramento Municipal Utility District

May 2018 - Aug 2018

- Improved troubleshooting for 1.5 million customers and used analytics software to enhance the billing portal experience
- Designed web pages using Javascript and React, under the Scrum project framework

PROJECTS

TikTok Sentiment Analysis on Russia-Ukraine War (Python)

- Built a pipeline to automatically collect 1000s of posts matching keywords using TikTok API and stored posts' statistics on database using MySQL
- Performed sentiment analysis using pretrained Transformer models to identify algorithmic or external influence on TikTok trends

Long Vector Architecture Optimization for Address Translation (Python)

- Proposed and simulated TLB designs with generated addresses
- Evaluated TLB design performances on multiple benchmark workloads with different memory access patterns
- Created parallel benchmarks to show best performing design performed better by 25%

Automatic Speech Recognition Model for Dysarthric Speech (Python)

- Iterated on pre-trained ASR NN models and used transfer learning via wav2vec2, XLSR, and DeepSpeech to improve accuracy of transcripts from patients with dysarthric speech

TECHNICAL SKILLS

Languages	Python, C/C++, R, SQL, HTML/CSS, Javascript
Developer Tools	Visual Studio Code, JupyterLab, Vim, Docker
Technologies/Frameworks	Git, PyTorch, Tensorflow

AWARDS & SCHOLARSHIPS

Finalist at the 2019 Facebook Data Challenge - West Coast
2019 Richard Tapia Scholarship