JACOB FEIN-ASHLEY

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EDUCATION

University of Southern California, MS Electrical Engineering

August 2023 – December 2024

• Coursework focused on the mathematical foundations of machine learning

Colorado School of Mines, BS Computer Science + Data Science

August 2020 – December 2022

- GPA 3.80
- 2021-2022 Palantir C-MAPP Scholar
- Academic Transcript
- Coursework focused on mathematics and machine learning

University of Colorado at Boulder

August 2019 - May 2020

• Academic Transcript

EXPERIENCE

Graduate Student Researcher, Data Science Lab @ USC

May 2023 - Present

- Researching areas broadly related to machine learning and data science
- Directed by Dr. Viktor Prasanna

SURF REU Scholar, MInDS@Mines

May 2022 – August 2022

- Initiated research for performance metrics of three-dimensional point clouds and meshes
- Implemented and designing an algorithm for scoring surface reconstruction meshes against respective point clouds
- Imputed missing data in three-dimensional point clouds and meshes

Undergraduate Research Assistant, MInDS@Mines

May 2021 - September 2021

- Assisted graduate students impute mineral distributions from mining data.
- Implemented a multi-modal distribution in a generative adversarial network (GAN) for various minerals
- Constructed sinusoidal three-dimensional positional encoding functionality for mineral positions

PUBLICATIONS

Conference Papers

• Fein-Ashley, J., Ye, T., Kannan, R., Prasanna, V., & Busart, C. (2023). Benchmarking Deep Learning Classifiers for SAR Automatic Target Recognition. 2023 IEEE High Performance Extreme Computing Conference (HPEC), 1–6.

Preprints

• Fein-Ashley, J., Ye, T., Wickramasinghe, S., Zhang, B., Kannan, R., & Prasanna, V. (2024). A Single Graph Convolution Is All You Need: Efficient Grayscale Image Classification.