

maxisawesome.github.io, github.com/maxisawesome, linkedin.com/in/max-marion

EDUCATION

OCCIDENTAL COLLEGE | MATH AND COMPUTER SCIENCE

August 2014 - May 2018 | Los Angeles, CA

- Graduated with a double major in Math and Computer Science
- One of three students to graduate from the Computer Science program in its inaugural year

CALIFORNIA INSTITUTE OF TECHNOLOGY January 2016 - March 2018 | Pasadena, CA

- Completed all Computer Science courses at Occidental then took additional CS classes concurrently at Caltech
- Related Coursework: Decidability and Tractability, Fundamentals of Computer Programming, Learning From Data, Machine Learning and Data Mining, Projects in Machine Learning, C Language Shop, Function Programming Language Shop.

EXPERIENCE

RESEARCH SCHOLAR, COHERE FOR AI | January 2023 - Present

Leading engineering and research efforts alongside world renowned machine learning researchers investigating performance improvements from data pruning for large language models at scale.

MACHINE LEARNING ENGINEER, KUNGFU.AI | December 2018 - January 2023

Developed machine learning solutions for clients in computer vision, natural language processing, and a variety of other fields. Projects were full stack, in which I performed machine learning engineering, DevOps, data engineering, and software engineering.

CLIMATE CHANGE AI SUMMER SCHOOL | August 2022

Attended ClimateChange.Al's research workshop bringing together interdisciplinary scientists and Machine Learning practitioners to research and implement cutting edge ML solutions to pressing problems in climate change

SPECIFIC PROJECTS AND CERTIFICATIONS

DATA PRUNING AT SCALE | Large Language Models

Researching intelligent methods of data pruning to improve base language model performance for less compute at scale (1B+ parameters, 1T+ tokens). Responsibilities include experiment setup and implementation, data pipeline profiling, model training, and research direction.

DENT DETECTION | Convolutional Neural Network

Developed a Mask RCNN with a ResNet backbone capable of detecting, segmenting, and pricing the repair of dents on car exteriors from a single picture

TRADING CARD AUCTION PRICE PREDICTION | TWIN NETWORK

Engineered, tested, and maintained a twin network with triplet loss to predict sales prices of collectables at auction. Project targeted rare cards with high value, leveraging ElasticSearch to derive reference cards for seeding

DATA AND PRODUCT SCIENCE | Causal Analysis

Lead statistical analyses generating business insights for a \$2.7+ billion company, resulting in key metric uplifts of up to 50%

SKILLS

TECHNICAL

Python • GCP • AWS Linux • Docker • Pandas TensorFlow • Pytorch Spark

SOFT

Comfortable working in organized settings and self-structured ones Understands receiving and giving mentorship