Alexander Muehleisen

742 N. Amerst Ave, Claremont, 91711, CA | +1 (840) 205-6878 | amuehleisen22@cmc.edu
https://www.linkedin.com/in/alex-muehleisen/ | *https://github.com/alex-muehleisen* | *https://alex-muehleisen.github.io/*

EDUCATION

Claremont McKenna College, Claremont, CA — Graduation: December 2022
- *BA in Data Science | GPA: 3.6/4.0*
- *McKenna Achievement Merit Scholarship (one of 15 recipients in the class of 2022)*
- *Study Abroad*: **University of Cape Town,** South Africa | *GPA: 3.7/4.0* — July 2022 – December 2022

TECHNICAL SKILLS

- *Computer Languages:* Python, SQL, R, JavaScript, Java, MATLAB, JSON, XML, Bash, Unix
- *Tools:* AWS, Databricks, PostgreSQL, Docker, Pandas, PySpark, Sk-learn, Apache Parquet, Azure, Power BI, Tableau, Git
- *Skills:* Data Analysis, Machine Learning, Modeling, Data Visualization, ETL Pipelines, API Tools, CI/CD, Agile

PROFESSIONAL EXPERIENCE

German Football Association (DFB), *Data Science Intern* | Frankfurt, Germany — April 2023 – Present
- Automated the creation of Scouting Tools/Products (Roster & Matches Overviews), thereby reducing manual effort by 50%
- Created pre- and post-tournament analyses using pre-fact bookmaker-based simulations and post-fact xG-based simulations
- Simulated the Euro '24 Qualifiers to predict the 24 teams to qualify, improving resource allocation for the Euros by ~20%

Los Angeles Dodgers, *Data Consultant* | Claremont, USA — January 2022 – June 2022
- Analyzed a dataset of 400,000+ observations and developed several linear, logistic, and random forest models trained with and without spin profile characteristics to determine whether batted-ball spin contributes to quality of contact in baseball
- Presented an interactive Power BI Dashboard with key findings to Dodgers R&D team, along with a complete 'R' package

Crestron Electronics, *Data Engineering Intern* | New York City, USA — May 2021 – August 2021
- Constructed a platform to automate the Project Intake process at Crestron, providing users with a centralized database to manage projects and automatically assign relevant BPs to New Project Approval flows on Microsoft Azure
- Reduced related business-processing times by 20–30% and followed an Agile development scheme, using Azure DevOps
- Integrated the Power BI REST API with Microsoft Power Automate and PowerPoint to allow users to instantly generate a complete, multi-slide .PPTX Presentation with specific and relevant information about their Project

Etesian Ecommerce, *Software Engineering Intern* | Remote — June 2020 – August 2020
- Designed full-stack website and built a client-specific member dashboard with KPIs & an automated build for new sign-ups

RxRate – an RxAll Company, *Co-CEO* | Remote — August 2019 – January 2020
- Coordinated website launch (Sep. 2019) and monitored performance with Google Analytics and Firebase SDK, achieving a bounce rate of 18%, a pages/session ratio of 2.73 and an average session duration of 00:03:15 (Sep. 2019 – Dec. 2019)

RxAll, *Software Developer Intern* | Yangon, Myanmar — May 2019 – August 2019
- Developed a map-based web-app (**RxRate**) with the Google Maps API, Node.js, JSON, and MySQL that helps travelers find safe pharmacies and avoid counterfeit drugs in developing countries – iterated with feedback from UI/UX testing
- Secured sign-ups to RxRate from over 20 pharmacies in Yangon, through sales pitches and product demonstrations

INDEPENDENT TECHNICAL PROJECTS

Senior Thesis, *'How COVID-19 Impacted Tertiary Education: Predicting the Educational Infrastructure of the Future'*
- Evaluated over 4,500,000 observations through multiple linear/logistic regression, polynomial features, regularization, and random forest models; made predictions through classification with a support vector machine

Developing a Highly Scalable Web Search Engine
- Achieved a webpage rendering time of 0.006s using WARC files from the multi-petabyte common crawl dataset

Scanning all Geotagged Tweets in 2020 to Monitor the Spread of COVID-19 on Social Media
- Analyzed a dataset of over 1.1 billion tweets using MapReduce to create parallel code and work with multilingual text

ADDITIONAL SKILLS AND INTERESTS

- *Language Fluency:* English (fluent) | German (fluent) | French (basic) | Afrikaans (basic)
- *Music Production:* Proficiency in Ableton Live, Avid Pro Tools, sound synthesis, and sound design
- *Competitive Sports:* Claremont Cougars Lacrosse (3 years) | TASIS England Varsity Soccer (3 years), Captain (1 year)
- *Competitive Traveling:* Traveled to and explored over 65 countries worldwide