# Andrew J. Higgins

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Portfolio: ajhiggins.streamlit.app

Ambitious data scientist and engineer seeking a challenging career role with a leading technology company. Eager to leverage technical expertise, customer-focused enthusiasm, and collaborative problem-solving in data analytics, computer vision, or natural language processing industries.

## **Skills**

Python Docker & Kubernetes Tableau

AWS Tensorflow & Keras FastAPI

Neural Networks & LLMs Image Classification Image Feature Recognition

## **Education**

#### Master of Information and Data Science, UC Berkeley

Sep 2022 - April 2024

• Project-backed experience with Python, modern deep learning architectures, pipeline engineering infrastructures, statistical analysis, experimental design, and data communication.

#### **BS Mechanical Engineering, University of Denver**

Denver, CO — Sep 2014 - May 2019

- Minors in Mathematics, Physics, and Spanish.
- Programmed Arduino microprocessor in C as part of Senior Design Project with Folsom Custom Skis.
- Used MATLAB, Solidworks, and LabVIEW for mechanical engineering and physics assignments.
- Tau Beta Pi Engineering Honors Society.

# Experience

### Data Science Project Experience, Coursework, and Competencies

- Data Scientist and full-stack Systems Engineer for capstone project: SkinScreen, an end-to-end skin cancer detection product. Trained and deployed deep transfer learning image classification models with Amazon SageMaker.
- Created user-tested, interactive data visualization website with Tableau using food nutrition data.
- Employed advanced image feature extraction techniques, dimensionality reduction, and supervised learning in fine arts image classification project.
- Built and load-tested a ML API endpoint with Python FastAPI, Redis caching, Kubernetes horizontal autoscaling, and Grafana performance metrics tracking.
- Trained and benchmarked Large Language Models (BERT, T5, GPT) against binary question answering tasks.

#### Metal Additive Manufacturing Department Manager, Visser Precision Denver, CO — Nov 2019 - Feb 2022

- Promoted to leadership position from Engineering after six months to hire, train, and manage a team of four.
- Spearheaded additive manufacturing production team serving aerospace, auto racing, and medical device markets.
- Cultivated customer and partner relationships by providing quotes and consultations and attending conferences.
- Practiced continuous process improvement with JobBoss ERP and Quality Management System.
- Reduced material waste by creating and maintaining detailed process documentation.

## Mechanical Engineering Intern, Killark Division, Hubbell Inc.

Saint Louis, MO — Summer 2018

Designed, procured, and built product testing workstation, achieving 94% 5-year Internal Rate of Return.

#### **Engineering Change Coordinator, IMI Precision Engineering**

Littleton, CO — Aug 2016 - Aug 2017

 Coordinated interdepartmental Engineering Change Orders for Littleton, CO & Queretaro, Mexico factories. Increased monthly on-time change completion from 43% to 80%; reduced backlog by 84%

# Personal Achievements and Interests

- Risk Manager of Lambda Chi Alpha fraternity
- Captain of High school ski team; US Rowing Youth National Championship 6th place finisher
- Spanish Language proficiency
- El Camino de Santiago, French Way: 535 miles backpacking, 33 days walking
- Semester abroad in Sevilla, Spain; Volunteer & student in Costa Rica