# **Theodore Dyer**

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Linkedin: in/theodoredyer | Portfolio: theodoredyer.github.io | Github: github.com/theodoredyer

#### **EDUCATION**

Johns Hopkins University - M.S. - Baltimore, Maryland, US

2020 - 2022 (Spring)

Degree: Master of Science, Computer Science (Focus in AI/ML) - GPA: 3.85

- Machine Learning: From scratch implementation and analysis of: k-nn (with edited and condensed algorithm variants), Decision Trees (ID3 and CART), Artificial Neural Networks (including backpropagation), and data preprocessing tools.
- **Data Science**: Problem identification, statistical inference, data visualization, ETL, EDA, linear + logistic regression, model evaluation, k-means clustering, decision trees & random forests.
- Artificial Intelligence: State Space Search, Genetic Algorithms, CSPs, Forward Planning, Reinforcement Learning.
- GPU Programming: Introductions to CUDA and OpenCL, concurrent programming.

University of California, Santa Cruz - B.S. - Santa Cruz, CA, US

2016 - 2020

Degree: Bachelor of Science, Computer Science.

#### **SKILLS**

- Data Tools: Apache Spark (PySpark), Python (Pandas, NumPy, scikit-learn, Streamlit), Excel, Brain.js
- Data Visualization: D3.js, Tableau, Matplotlib

- Databases: SQL: SQLite, NoSQL, Amazon S3
- Software Development: Python, Java, C, JavaScript
  HTML/CSS

#### **EXPERIENCE**

Humanyze | Boston, MA

5 mos | Mar 2021 - July 2021

### **Data Engineer Intern**

- Rebuilt existing company data pipeline utilizing PySpark/S3 to solve existing PostgreSQL scaling problems with larger clients.
- Facilitated communication with engineering and analytics teams to ensure cross-team goals and expectations were unified.

Tech Skills & Tools: Apache Spark (PySpark), Amazon S3, Amazon Elastic MapReduce (EMR), PostgreSQL

OpenPath | Irvine, CA

5 mos | **Nov 2020 - Mar 2021** 

### **Data Science Intern (Lead)**

- Lead weekly standup meetings to assess project progress and delegate tasks from mentors to appropriate team members.
- Current Projects: Standardizing ecommerce data from multiple input platforms (Shopify, PayPal, Apple Pay, etc). Generating complex SQL queries to identify key customer demographics, suspicious transactions, and customer losses.

Tech Skills & Tools: SQL (Azure Data Studio - SQL Server), Python (Pandas, scikit-learn), Tableau

Data Projects | Santa Clara, CA

11 mos | **Nov 2019 - Present** 

https://theodoredyer.github.io/projs.html

#### **ML5.**js Mask Detection

• Trained a machine learning model with images of proper and improper mask wear using the ml5.js JavaScript library, and deployed this model to my website - using any camera for model input the site will display its prediction for mask detection.

Tech Skills & Tools: JavaScript (ml5.js, p5.js) HTML, CSS, Image Classification, Model Deployment

#### Big Picture Game Studio | Santa Cruz, CA

5 mos | Jun 2019 - Oct 2019

## **Unity Development Intern**

- Developed mobile game progression and currency systems in addition to core game-play logic in C# (Unity Game Engine)
- Collaborated with remote artists in designing UI elements and facilitated UI integration to build an intuitive user experience.

Tech Skills & Tools: C# Scripting, Unity Engine, Project Management.

## **CERTIFICATIONS**

#### **Udemy: Python for Data Science and Machine Learning Bootcamp**

(Issued September 2020)

• Implemented and evaluated supervised and unsupervised machine learning models. Intro to NLP, Big Data, Spark.

## **Linkedin Learning: Python for Data Science Essential Training (Parts 1&2)**

(Issued October 2020)

• Cleaning data, web scraping (beautifulsoup), exploratory data analysis and data visualizations w/ matplotlib and seaborn.

## **Linkedin Learning: SQL Essential Training**

(Issued October 2020)

• Topics included complex queries (sorting/filtering), JOINs, aggregate functions and transactions, triggers for automation.