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**
Degree: Master of Science, Computer Science (Data science and cloud computing focus)

University of California, Santa Cruz - **B.S. -** Santa Cruz, CA, US   **2016 - 2020**
Degree: Bachelor of Science, Computer Science

Notable Recent Coursework:
- **Data Programming for Visualization**: D3.js for Visualization and Python (Pandas) for analysis of various datasets.
- **Probability and Statistics for Engineers**: Stochastic analysis: Bayes theorem, independence, Bernnoulli trials.
- **Machine Learning**: Supervised/unsupervised + parametric/non-parametric models, assessing performance, Bias.
- **Analysis of Algorithms**: Asymptotic algorithm analysis, NP-Complete problems, dynamic programming.

SKILLS

- **Data Analysis**: Python: Pandas, NumPy, Excel
- **Data Visualization**: D3.js, Matplotlib, seaborn
- **Machine Learning**: Python: scikit-learn, TensorFlow

- **Databases**: SQL: SQLite, NoSQL.
- **Software Development**: Python, Java, C, JavaScript & HTML/CSS

DEVELOPMENT EXPERIENCE

Data Projects | Santa Clara, CA   11 mos | **Nov 2019 - present**
https://theodoredyer.github.io/projs.html

Seattle Police Data Analysis
- Identified issues in police accountability with data analysis and visualization of Seattle police data (Pulled from seattle.gov).
- Created a population density heat map of Washington state with 2018 census API data to link patterns to county populations.

   Tech Skills & Tools: Python (Pandas, NumPy) for analysis, JavaScript (D3.js) HTML and CSS for web hosted visualization.

Course Review Data Analysis
- Generated insights for informed course selections by consolidating university professor feedback data into composite scores and performing exploratory data analysis.

   Tech Skills & Tools: Python (Pandas, NumPy) for analysis, Python (Seaborn, Matplotlib) for jupyter notebook visualizations.

Brain.js Text Color Predictor
- Utilized Brain.js (JavaScript neural network framework) to create a network with the ability to predict appropriate text colors for a web page to maximize contrast on randomly generated background colors.

   Tech Skills & Tools: JavaScript (Brain.js), HTML and CSS

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)**

- Created and updated database systems. Created complex queries with sorting and filtering. Accessed related tables with JOINs. Used aggregate functions and transactions, automation with triggers.