


# TYLER RICHARDETT

DATA SCIENTIST

 tyler-richardett

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 tylerrichardett

 tylerrichardett.com

## WORK EXPERIENCE

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### Machine Learning Engineer II

Sep. 2021 – Present

### Machine Learning Engineer

Mar. 2021 – Sep. 2021

### Data Analyst

Aug. 2019 – Mar. 2021

### Data Analyst

Apr. 2018 – Aug. 2019

### Communications Associate

Jan. 2017 – Apr. 2018

### Communications Assistant

Jan. 2016 – Jan. 2017

### *ComponentWise Solutions*

- » Served as the data science technical lead for the Transformation Data Science Services project at U.S. Citizenship and Immigration Services, managing a team of 12 data scientists.
- » Designed and implemented a solution to systematically classify key evidence documents, which leverages such deep learning frameworks as object detection and text extraction and uses purpose-built convolutional and recurrent neural networks. This solution has nearly doubled the 30-day adjudication rate of certain high-priority cases.
- » Led a team of data scientists in building a solution to systematically validate applicant-submitted passport-style photos against a series of nuanced card production requirements—leveraging a facial feature detection model, a range of computer vision techniques, and binary classification models trained to detect the presence of eyeglasses and/or headwear.

### *EAB, Academic Performance Solutions*

- » Developed an automated recommendation system for individual colleges and departments to identify their most comparable peers, using a combination of natural language processing and composition similarity measures borrowed from community ecology—saving deans and department heads the countless hours they spent manually performing this exercise in Excel.
- » Generated actionable insights from a benchmarking dataset—including studies of intentionally small courses, inconsistent maximum capacity policies, and optimal resource allocation—promoting data-informed decision-making at more than 60 member colleges and universities.

### *New America*

- » Managed the development and deployment of a data storytelling project which merged U.S. Department of Education data of all types and levels of granularity into a single, user-friendly application that enables end users to view and compare more than 100 distinct data points across time at the institution, sector, state, and national levels.

## EDUCATION

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### M.S., Data Analytics Engineering

George Mason University | 2018 – 2020

### B.A., Public Relations & Strategic Communication

American University | 2013 – 2017

## PUBLICATIONS & AWARDS

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### Natural Disaster Building Damage Assessment Using a Two-Encoder U-Net

Advances in Visual Computing. ISVC 2020. Lecture Notes in Computer Science, vol 12509. Springer, Cham. | Dec. 7, 2020

### Association of Public Data Users Data Viz Award: Researchers and Students Category

Issued by Association of Public Data Users | Aug. 2017