

# MAX EFREMOV

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## SUMMARY of KEY QUALIFICATIONS

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- Machine learning engineer with infrastructure and data science knowledge specialized in delivering end-to-end models in production environments
- Strong understanding of mathematical foundations behind machine learning algorithms and excellent ability to communicate insights in clear, concise, compelling manner

## EDUCATION

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### Lambda School, remote

June 2020

#### *Data Science Fellow*

A 9-month, 1,600+ hour data science and software development program with a concentration in statistics, machine learning and real-world model development, validation, and deployment. Relevant coursework:

- Data Engineering and Infrastructure
  - Data Mining & Wrangling ◦ APIs and Web Scraping ◦ Data cleaning ◦ Databases ◦ Amazon Web Services (AWS) ◦ GitHub
- Predictive Modeling
  - Descriptive Statistics and Hypothesis Testing ◦ KNN ◦ Regressions ◦ Bias-Variance Tradeoffs ◦ Model Testing, Validation
- Machine Learning and Advanced Prediction
  - Natural Language Processing ◦ Neural Networks ◦ CNNs for computational imaging ◦ XGBoost for ensemble learning

### Towson University, Baltimore, MD

May 2019

#### *Bachelor of Science in Economics* cum laude; honors college

- Member of Honors College; GPA 3.84, Dean's List every semester; studied abroad at Yonsei University in Seoul, South Korea
- Econometrics, Statistics, Computational Economics, Macroeconomic Theory, Microeconomics, Money & Banking, Finance

## PROJECT EXPERIENCE

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### Center for Advanced Defense Studies, Washington, DC

January – March 2020

#### *Data Science Technical Consultant, SanctionsExplorer*

Developed search tool web application on cross-functional team that provides information pertaining to internationally-sanctioned entities from 100s of government agency databases and reports with accompanying analytics and visualizations

- Deployed continuously web-crawling, natural language processing and database generating model; features include entity extraction from narrative-style, unstructured text
- Continuously tested, persistently deployed, routine automatic updating; hosted as full-stack web application with team of 3 data scientists on a tech stack of Python, Flask, NLP packages like spaCy and AWS Elastic Beanstalk, CodePipeline, Route 53

### Computer Vision Web Application, Cross-team remote

November – December 2019

#### *Machine Learning Engineer, PicMetric*

Batch user image object detection and classification web application; 3 cutting-edge computer vision models perform static image or live object detection

- Deployed YOLO, ResNet50, and MTCNN models as Flask web application with user login functionality
- Developed and tuned vision models in AWS SageMaker, hosted continuously on EC2

## WORK EXPERIENCE

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### Morgan Stanley, Baltimore, MD

June 2018 – August 2018

#### *Analyst, Legal & Compliance Division*

Supported Wealth Management compliance teams in their testing, audit, and reporting functions during summer program

- Developed and enhanced controls around a firm-wide global blacklist pertaining to internationally sanctioned entities, through which every account opening and 10,000,000s of transaction at the firm pass through every day
- Reviewed millions of securities transactions other business activities of firm's 15,000 financial advisers to ensure compliance with the complex regulatory and legal environment

### AmeriCorps National Civilian Community Corps, IA, NE, MI, IL

#### *Field Team Leader*

January 2014 – November 2014

Led a highly diverse team of 9 young adults in a year-long federal, national community service program throughout American Midwest

## COMMUNITY LEADERSHIP

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- *Group Facilitator, Baltimore Artificial Intelligence Forum*, October 2019
- *Assistant Head Coach, Baltimore City High School Men's Lacrosse Program*, January – April 2016
- *Disaster Response - Team Leader, All Hands Project Detroit*, January – February 2015