# **Erkin Polat**

https://erkinpolat.github.io/

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## Education

Minerva Schools San Francisco, CA 2017-2021

- BSc in Computational Sciences, minor in Economics, June 2021
  Double concentration in: "Computer Science & AI" and "Data Science & Statistics"
  Coursework:
  - In my major: Causal Inference, Algorithms & Data Structures, Linear Algebra, Calculus, Machine Learning,
    Computability and Complexity, Modern Computational Statistics, Modeling and Simulation, Software Development,
    Harnessing AI Algorithms, Deep Learning, Reinforcement Learning, Formal Analysis
  - In my minor: Boom, Bust and Bubbles, Economic Theory and Tools, Development Economics, Econometrics

Inanc High School Kocaeli, Turkey 2012-2017

• The only high school in Turkey for gifted students.

## Experience

Teaching Assistant Minerva Schools 2020-2021

- Teaching assistant for STEM related Capstone projects of the juniors in Minerva Schools.
- Provide guidance on projects based on my expertise and experience in the fields of science and technology.
- Hold office hours and grade assignments.

### **Machine Learning Intern**

### **Analythinx at Komtas**

2019

- Attended classes, lectures and coding challenges in a 2 week accelerated bootcamp.
- Worked on a project for extracting data from Twitter using Hadoop tools on a virtual machine.
- Worked on an NLP project for extracting data from newspapers and categorizing them using Tf-Idf.

Civic Partnership Potrero Digital 2020

- Potrero Digital is a non-profit organization based in Buenos Aires aiming to provide underprivileged youth a training in digital tools, help their social integration and assist them get jobs.
- Give presentations to students about machine learning and data science
- Work on a curriculum so they can integrate machine learning in their programs in the future.

Analyst SF Opera 2017

- Research how to build systems that enable the SF Opera to increase internal transparency and break down organizational silos?
- Mentored by Sean Waugh, Artistic Planning Manager.

#### **Communications and Events Assistant**

#### Minerva Project

2020

 Work with the City Life team to organize and host city life and cultural immersion related events for Minerva students in London.

# **Projects**

For a detailed overview of each project and the code you can click on each project or check out my portfolio.

- Neural Network from Scratch Use numpy only to code a working classifier neural network.
- <u>CookBook: Social Media for Food</u> Develop a full-stack social media website with Django for recipe preservation.
- Computer Vision: Facemask Detection Build and fine tune a CNN for detecting if someone's wearing a facemask with keras.
- Flappy Bird with Q-Learning Write object-oriented game code for Flappy Bird. Build a q-learning agent to play the game.
- Bayesian Inference to Predict CO<sub>2</sub> Emissions Use PyStan to do Bayesian inference to predict CO<sub>2</sub> levels in the future.
- NP. NP-Complete with Phutball and Sudoku Article that illustrates reductions to show the complexity classes of different games.

## Languages - Technologies

• Python, Django, Stata, R, HTML, CSS, Bootstrap, SQL, Jupyter notebooks, command line

## Other interests/skills

• Chess, piano, guitar, singing, English (fluent), Turkish (native), German (intermediate)