Tornike Onoprishvili

Full-stack AI specialist

I am a full-stack AI specialist. Teaching, researching, deploying - you name it. I can plan, implement and deploy AI-backed apps for general use.

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Tbilisi

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WORK EXPERIENCE

Full-stack AI specialist
Upwork Inc. ↗

08/2020 - Present
A popular online freelancing company

Achievements:
- Deployed real-time 2D human pose estimation on the web ↗
- Fine-tuned and deployed GPT-2 as an easy to writing assistant ↗
- Developed deep neural network for chemical toxicity prediction ↗

AI online tutor
Freelancer

01/2021 - 04/2022
A popular online freelancing company

Achievements/Tasks
- Guided Master's thesis in AI for Saint Francis Xavier University student
- Oversaw Bachelor's thesis in Data science for Duisburg Essen University student
- Guided Bachelor's thesis in Computer Vision for University of Washington student

Data Scientist
ACT Inc.

02/2020 - 09/2021   *Tbilisi, Georgia*
ACT - Analysis and consulting firm, provides business intelligence and polling services

Achievements/Tasks
- Created a collaborative filtering solution for automatic recommendations based on customer transaction data of a local pharmaceutical company
- Developed a data pipeline for cleaning, aggregation, and automatic reporting for a hospital transactional database
- Oversaw communications with the data engineering team and delivered reports based on the data insights

PUBLICATIONS

Realization of true all-optical AND logic gate based on nonlinear coupled air-hole type photonic crystal waveguides (04/2016 - 09/2017) ↗
Designing laser-powered logical gates to build and AND gate. (One of the basic atoms for any computing system).

Functional all-optical logic gates for true time-domain signal processing in nonlinear photonic crystal waveguides (06/2017 - 03/2020) ↗
Designing an optical NAND gate previous research. Any computing system may be built using many NAND gates.

SKILLS

`Python` `Machine Learning` `MLOps` `Data science`
`Development` `Git` `Bash` `Docker` `Tensorflow`
`PyTorch` `GCP` `Azure` `Mathematics`
`Scikit-Learn` `Pandas`

PERSONAL PROJECTS

Style transfer network in Javascript (08/2021 - Present) ↗
- Implemented a bleeding-edge research paper from scratch
- Optimized and packaged the network for use in Javascript
- Deployed the network as a static website, with technical explanations

Research in Tabular Deep Learning (05/2022 - Present) ↗
- Created day-to-day logs of research progress
- Replicated the current state-of-the-art papers in tabular DL

Research in Photonics with Ferroelectric Vortex Lattice (03/2022 - Present)
- Performed material testing in pymeep environment
- Performed dispersive material testing for metallic silver cylinders

Project Name

EDUCATION

BEng in Electrical Engineering
Free university of Tbilisi ↗

2015 - 2019   *GPA - 3.56*

LANGUAGES

English
Native or Bilingual Proficiency

Russian
Professional Working Proficiency