

# 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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## WORK EXPERIENCE

### Full-stack AI specialist

Freelance

08/2020 - Present

Achievements:

- Created a neural network for toxicity prediction in unseen substances
- Led an end-to-end project with artistic style transfer networks
- Designed stress estimation application for use in VR headsets in TensorFlow
- Created a trading analytics pipeline for automatic aggregation of FX trading portfolios

### 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

### Lecturer

Free university of Tbilisi

09/2019 - 02/2020

Tbilisi, Georgia

Achievements:

- Delivered computer architecture lectures
- Co-authored two research papers concerning optical logic gates

## 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 an 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.

29 March, 2022

## SKILLS

Python

Machine Learning

Data science

Software development

Git

Bash

Docker

Tensorflow

PyTorch

GCP

Azure

Mathematics

Scikit-Learn

Pandas

## PERSONAL PROJECTS

Holistic pose-net (02/2022 - Present)

- Created CI/CD pipeline for automating build/deployment processes
- Created a distilled network for better performance on mobile devices
- Refined posenet output to create useful body mappings

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

## EDUCATION

### Master of Technology

Georgian Technical University

2019 - 2021

Project:

- Next sentence prediction task on Arxiv dump based on DistilGPT2 architecture

### Bachelor of Engineering

Free university of Tbilisi

2015 - 2019

GPA - 3.56

Thesis:

- Realization of true all-optical AND logic gate based on nonlinear coupled air-hole type photonic crystal waveguides

## LANGUAGES

English

Native or Bilingual Proficiency

Russian

Professional Working Proficiency