

# Taras Sereda

✉ [taras.y.sereda@proton.me](mailto:taras.y.sereda@proton.me)

☎ +380934664035

## SUMMARY

Self thought programmer and deep learning professional. Passionate about technologies and their novel applications. Interested in Generative Modeling, Unsupervised learning and Bayesian Deep Learning as well as in building multi-modal environments combining texts, images and sounds as data sources for versatile artificial models of perception.

Professional highlights: speech technologies, image processing, Machine Learning, Python, C++.  
Contact me in case you want to collaborate.

## SKILLS

Generative Modeling	Python
Neural Networks	C++
Machine Learning	CUDA-C
Deep Learning	Linux
Conv Nets	Shell Scripting
LSTMs	Databases
Software Development	
Performance Tuning	

## EXPERIENCE

**Vocalics.AI (Kyiv, Ukraine)** <https://www.vocalics.ai>

02/2019 - Present

Co-founder, Director of Research

Co-founded a speech synthesis startup. At VocalicsAI we create synthetic dubs. Our goal is to break communication barriers by preserving speaker's identity and authentic prosody in cross-lingual dubbing and content localization.

- We are doing a world class research in speech synthesis and pushing the boundaries of knowledge in the field.
- We built an MVP for English-Spanish dubs.
- We created web based tools for convenient interaction of a user with speech synthesis models.

I'm leading a team of researchers, who are working on a tough and interesting problems of speech synthesis. For the purposes of our ML experiments we've built our own deep learning rigs, which we think are great. Being a co-founder I'm also involved in business and product dimensions of our venture. We think that what we created so far is unique, and now the biggest challenge we are working on is – how to make our models accessible on large scale.

Watch demos on our [YouTube channel](#)

**Ring Labs (Kyiv, Ukraine)**

09/2018 - 02/2019

Machine Learning in Audio Engineer

Was hired for a specific project aimed to detect gunshots based on audio signals.

- My team collected a significant database of gunshots. Also we created web based audio labeling tool for further dataset preparation purposes.

- We created a Neural net based Gunshot Detector, together with model evaluation tool kit.

- Prototype was successfully deployed on edge devices, with restricted compute power.

**Whisper.AI (San Francisco, CA)**

02/2018 - 08/2018

Machine Learning Engineer

Hearing aids startup. Working on blind source separation. Main focus of the work is implementation of scientific papers: Deep attractor networks, Deep Clustering, phase reconstruction algorithms, time domain source separation for low latency applications.

**Log2Tech (Kyiv, Ukraine)**

10/2017 - Present

Co-Founder, Machine Learning Researcher.

Speech Technologies startup. Currently working on TTS family of algorithms.

**Audyssey (Kyiv, Ukraine)**

04/2017 - 11/2017

Machine Learning Researcher

Signal processing, audio analysis, automated speech recognition algorithms. In particular involved in developing of keyword spotting algorithm and estimation of room acoustic parameters from provided speech samples.

Concepts / Technologies: Deep Learning, Python, Pytorch, Tensorflow, GPU computing.

**Ring Labs (Kyiv, Ukraine)**

09/2016 - 04/2017

Machine Learning Researcher

Team Lead of Object Detection team. Implementation algorithms of object detection on videos.

CNNs, SSD(Single shot detector) like approaches.

Concepts / Technologies: Deep Learning, Python, C ++, Tensorflow, Mxnet, GPU computing.

**Sync Words (Kyiv, Ukraine)**

12/2015 – 09/2016

Machine Learning Engineer

Implementation algorithms of Neural Networks. Text/Face Detection. Text processing using LSTMs.

Concepts / Technologies: Deep Learning, Python, Java, CUDA-C, Tensorflow, Neon, GPU computing.

**FreeLancer for IPGraphy**

10/2015 – 07/2016

Machine Learning Engineer

Developing algorithms for similar images lookup.

Concepts / Technologies: Deep Learning Conv Nets, Image Classification/Clustering Python, GPU computing

**Depositphotos (Kyiv, Ukraine)** 12/2014 - 12/2015

Machine Learning Engineer

Developing and performance tuning algorithms for Data Analysis purpose in social network project.

Concepts / Technologies: Deep Learning Conv Neural Networks Image Classification Recommendation Systems Mathematical Analysis Machine Learning Python Amazon EC2 GPU computing

**Orga Systems (Kyiv, Ukraine)** 03/2013 - 12/2014

Software Engineer

Key skills: Databases, performance tuning, data migration, PL/SQL scripting, Python/C++, bash scripting.

involvements: performance tuning databases, enrolling environments, RAC; bug fixing in C++ application code; providing on-site consultations; building reporting solutions; performance/functional testing; product configuration (billing/invoicing parts); data migration of millions of subscribers.

**Miratech (Kyiv, Ukraine)** 10/2012 - 03/2013

PL/SQL Developer

Working as out staff employee at KyivStar (GSM operator in Ukraine) Oracle databases.

Writing PL/SQL code, performance tuning Building automated reporting system based on SAP Business Objects

## EDUCATION

**Kyiv National Economics University** 2011 – 2012

Master's degree, Mathematical Modeling

**Kyiv National Economics University** 2007 - 2011

Bachelor's Degree, Economic Cybernetic

**Polytechnical Lyceum of NTUU "KPI"** 2004 - 2007

## INTERESTS

Arts, Photography, Space (NASA Programs), Technologies of the future, Music, Adventures, World languages.

## CERTIFICATIONS

**Machine Learning** 09/2014

Coursera

**Image and video processing: From Mars to Hollywood with a stop at the hospital**

03/2015

Coursera

**BerkeleyX: CS100.1x Introduction to Big Data with Apache Spark**

07/2015

edX

## LANGUAGES

English ( Full professional proficiency )

Ukrainian ( Native or bilingual proficiency )

Czech ( Limited working proficiency )

Russian ( Native or bilingual proficiency )