

Titus Nicolae

software engineer
pursuing deep learning

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EXPERIENCE

Intel Movidius, Timisoara, Romania — Software Engineer

AUGUST 2017 - NOW

Optimizing Neural Network runtime for Myriad embedded chip
[Algorithms, C++, Python, Caffe, Tensorflow]

Romanian Institute of Science and Technology, Cluj Napoca, Romania — *Machine Learning Research Assistant*

FEBRUARY 2017 - AUGUST 2017

Researching Riemannian optimization methods for deep learning.
[Math, Deep Learning, Machine Learning, Tensorflow, Algorithms, Python, C++, Linux]

Everseen, Timisoara, Romania — *Software Engineer*

MAY 2016 - NOVEMBER 2016

Implemented activity recognition from video for non-scan detection at point of sale.

[Deep Learning, Tensorflow, Algorithms, Python, C++, Linux]

Microsoft, Timisoara, Romania — *Software Engineer*

JUNE 2015 - MAY 2016

Debugged and improved machine learning models for Bing Local Search.

[Machine Learning, Algorithms, Python, C++]

3Pillar Global, Timisoara, Romania — Software Engineer

NOVEMBER 2013 - JUNE 2015

Maintained a custom CMS that hosted hundreds of websites, tens of thousands of dynamic web pages. [Python, Django, Linux]

SKILLS (sorted by decreasing proficiency)

Data structures & Algorithms
> Python 3 > C++14 > Deep Learning > Machine Learning
> Math > Linux

PRO BONO

Teaching kids programming at local Coderdojo 2014-2016

Discussing algorithms problems with students from university 2013-2016

LANGUAGES

English, Romanian

OTHER

Went to ECCV 2016 & Data Science Summer School 2017

EDUCATION

Politehnica University, Timisoara — Masters in *Software engineering*

SEPTEMBER 2016 - JUNE 2018

Master thesis: Towards grain classification with reinforcement learning

Implemented a system to classify grain with Movidius Neural Compute Stick at 100 FPS. Studied how to use Reinforcement Learning in this context. [CNN, C, Reinforcement Learning]

Politehnica University, Timisoara — Bachelor in *Software engineering*

SEPTEMBER 2008 - JUNE 2013

Bachelor thesis: 3D reconstruction from two unconstrained viewpoints.

Implemented an automatic differentiation & optimization software to solve the camera pose and scene geometry. [Math, Python, C++]

PERSONAL PROJECTS

Sudoku Solver 2016

Kaggle MNIST Digit recognition 2012

Wrote my own KNN and random forest models and got 93% accuracy.

8x8x8 LED Cube 2010

Designed the schematic & board, etched the board, soldered the circuits, wrote the microcontroller software, hacked together the PC software.