# Attila Nagy

# CONTACT

+46708499543Phone

attilanagy85@gmail.com Mail

https://github.com/NagyAttila GitHub

## INTRODUCTION

I have a background in telecommunication, automotive industry and machine learning. In the recent years I have developed an interest in deep learning through self-studies, that led to my previous job at RumbleStrip. We worked on adaptive spoilers for the heavy truck industry to lower fuel consumption. Before that, I worked with self-driving cars at Volvo Cars in Active-Safety, and with 3G networks at Nokia Siemens Networks in Budapest. Currently I am working on PacketCore at Ericsson.

My technical interest mostly rotates around open-source software development, cryptography, Linux, machine and deep learning, functional programming, and a little bit of web-development. In my working environment, I tend to be social and discuss books and podcasts I read and listened recently.

My current greatest endeavour is to start my own company and work as a freelancer.

# **WORK**

#### HiQ, Consultant at Ericsson

Software Developer, Sweden, Full-time

Functional Tester, System Tester, DevOps Roles:

C++, TTCN Programming: Applications: LTE, PacketCore

RumbleStrip 09/2017 - 10/2019

Software Architect and Developer, Sweden, Full-time

SW Architect, Algorithm Developer Roles:

Programming: Python, C, Matlab

Applications: Adaptive Roof-Deflector, Data-Analysis

#### ÅF, Consultant at Volvo Cars

07/2014 - 07/2016

Self-Driving Car Engineering, Sweden, Full-time

Self-Driving Car Developer, Unit Tester Roles:

Matlab, Simulink, Python, C++ Programming:

Applications:Active-Safety, Data-Analysis, Sensor-Fusion, Mapping, Logging

#### Nokia Siemens Networks

08/2009 - 08/2012

04/2020 - Now

Software Engineer, Hungary, Full-time

Scrum Master, Functional Tester, Unit Tester, DevOps Roles:

C/C++, Python, Perl, BASH, TNSDL, LDAP Programming:

GDB, Valgrind, oProfile Debugging:

# **EDUCATION**

## Deep Learning Nanodegree

 $Udacity,\ www.udacity.com$ 

01/2017 - 06/2017

Assigment 1: Vanilla Neural Network from scratch

Assigment 2: Image Classification by Convolutional Neural Network Assigment 3: TV script generation by Recurrent Neural Network Assigment 4: Language-translation by Recurrent Neural Network

Assignment 5: Face image generation by Generative Adversarial Networks Source-code: https://github.com/NagyAttila/Udacity\_DLND\_Assignments

## MSc. Computer Science

Chalmers University of Technology, Sweden

09/2012 - 04/2014

Specialization: Distributed Systems and Networks

Thesis' Title: Energy Efficient, High-speed Communication in Wireless Sensor Networks

Thesis' Keywords: Opportunistic Routing, Bulk-transfer, TinyOS, nesC

Student Project: Carolo Cup, Germany, self-driving miniature cars, team leader Research Project: Power consumtion disaggregation and classification with SVM

## **ERASMUS Scholarship**

University of Applied Sciences Ravensburg-Weingarten, Germany

09/2008 - 01/2009

Field: Embedded Systems

## **BSc.** Electrical Engineering

Obuda University, Hungary

09/2004 - 06/2009

Specialization: Embedded Systems

Thesis' Title: Robot Simulation isepspacenGL Environment Thesis' Keywords: Industrial robot simulation, OpenGL, C++.

Student Project: Remote-controlled miniature car via bluetooth, 8-bit Atmega micro-controller

# **LANGUAGES**

English Swedish Hungarian

## INTEREST

Technical: machine learning

free/open-source software blockchain technology functional programming

Sports: rock climbing

slacklining running yoga

Others: meditation

politics

# **PROJECTS**

## HiQ, Consultant at Ericsson

04/2020 - Now

After 10 years I am back in Telecom working on the next generation of telecommunication networks. Most of my work currently involves development on the PacketCore network, Functional Testing using TTCN and System Tests.

## RumbleStrip

09/2017 - 10/2019

Working with adaptive roof-deflectors for trucks using machine learning, AWS and embedded systems to lower fuel consumption. Mostly worked with a Bayesian Regression model for predicting the optimal position of the roof- deflector. But earlier at the proof of concept stage we experimented with a variant of K-Nearest- Neighbour algorithm, Decision Trees and Deep Neural Networks. At the end due to the lack of available data and limitations in our product's HW, we decided to use a Bayesian Regression model. Sensor data was collected using Python on a RaspberryPi, stored in AWS, and evaluated in Matlab. Later, our model was prototyped in an embedded environment on a STM32 board, and field tested using LINAK-LA32 actuators on Volvo trucks.

#### ÅF, Consultant at Volvo Cars

07/2014 - 07/2016

I worked as a SW developer in Active Safety in the Sensor Fusion team using Matlab and Simulink. My work mostly involved post-processing of sensory data for our particle filter algorithm, that fused our positions from the GPS sensor and the IMU.

#### Nokia Siemens Networks

08/2009 - 08/2012

As part of the HLR and DXA teams for 3G development, I worked in a cross-functional team, doing testing, coding and maintenance using C++ and Python.

## REFERENCES

#### Milad Pouyanmehr

Phone: +46 767607403

Email: milad@rumblestrip.tech

From: RumbleStrip

#### David Andersson

Phone: +46 735803819

Email: david.andersson@nvidia.com From: Volvo Cars Corporation