

Vít Listík

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<https://www.linkedin.com/in/tivvit>

I'm an enthusiastic software engineer interested in DevOps, web technologies, and machine learning. Currently, I lead a team focusing on logging infrastructure, which is a part of an internal cloud at Seznam.cz. I prefer cooperation and open communication within the team, and I demand code reviews for our codebase.

I am also using convolutional neural networks as part of my Ph.D. research. I focus on email spam detection in cooperation with the Email.cz team. My contribution lies in a multi-dimensional distributed clustering of data extracted from images contained in email messages.

WORK EXPERIENCE

Lead Software Engineer *Seznam.cz - infrastructure team* 7/2020 - present

I lead an internal logging team (part of Seznam.cz internal cloud - scif.cz).

My key contributions are scaling the solution to reliably and effectively process over a million log messages per second using open-source (Apache Kafka, Grafana Loki, and Elasticsearch) and in-house components (mostly written in Golang).

- Managing people with focus on delivering features and personal growth
- Implemented high performance Kafka to Grafana Loki sender in Golang
- Automation - Gitlab CI, Terraform, Kubernetes, and Ansible
- Cooperating on internal cloud design decisions
- Solving production on-call incidents

Python/C++ developer *Seznam.cz - Email.cz team* 7/2014 - 7/2020

Biggest freemail provider in Czech Republic (~50M emails/day)

Anti-spam, Data Processing (Hadoop, Spark), Elasticsearch, Machine Learning (NLP, CNN), Neural Nets (Keras, Tensorflow), Reliable scalable services, Linux

- Image processing pipeline (Design and implementation, Convolutional NN)
- Email statistics aggregation pipeline - DB writes optimization (Golang, multi-DC replication)
- Email security - integration of DMARC, DKIM and SPF
- Aerospike DB (key-value), Elasticsearch, Hadoop (Map-reduce, Spark), Distributed storage
- Reading group - organizer, speaker. Created opportunity for others to share knowledge

Freelance Web developer *Founder at Web-kladno.cz - ID 87582961* 2008 - present

Web applications and presentations - backend (PHP), frontend (JS, HTML5, CSS3)

Complete list of positions - [linkedin.com/in/tivvit](https://www.linkedin.com/in/tivvit)

EDUCATION

Czech Technical University in Prague (CTU) 7/2015 - present

Faculty of Electrical Engineering (FEL) **Artificial Intelligence**

Working on thesis (finished all courses)

Ph.D.
part-time

Topic: Email image spam detection using high-dimensional stream clustering

- Supervision: Prof. Ing. Václav Hlaváč, Csc. and Ing. Jan Šedivý, Csc.
- Convolutional NN, Tracking image detection, User reaction prediction, OCR, clustering

CTU, FEL, **Software Engineering** 7/2013 - 6/2015

Ended by the final state exam

Master Thesis: Detecting Phishing Emails in Czech Language for Email.cz

Masters

- Won Cisco Outstanding Thesis Award 2015
 - Machine Learning (NLP, Bag of Words, Decision trees), Python
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CTU, Faculty of Biomedical Engineering (FBMI), **Biomedical Informatics**

7/2010 - 6/2013

Ended by the final state exam

Bachelors

Bachelor Thesis: Algorithms for Signal Processing in Respiratory Care

- iMon - Real-time measuring of respiratory system parameters (C#, Ni-DAQ, Multithreaded)
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PUBLICATIONS

- V Listík, J Šedivý, V Hlaváč; Email Image Spam Classification based on ResNet Convolutional Neural Network; ICISSP 2020
 - V Listík, Š Let, J Šedivý, V Hlaváč; Phishing Email Detection based on Named Entity Recognition; ICISSP 2019
 - V Listík; CNN based near-duplicate image detection used for email spam detection; Poster 2019
 - Thesis supervision
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All publications - tivvit.cz/research

PROJECTS

YAP - Yet Another Pipeline

2019 - present

ML, Pipeline, Golang

Stalker

2018 - present

Active window tracking, Time management, Statistics, Rclone, Python

Datasets

2016 - present

Organizing and searching data sets, experiment consistency and repeatability

Based on Goods: Organizing google's datasets. Python, Flask, OSS, Docker

Web applications and presentations

2005 - present

- Surfarena.cz - Custom made reservation system for indoor surfing, PHP
 - Presentation websites - Mostly in PHP and JS. Wordpress or custom made CMS
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More projects - tivvit.cz and code - github.com/tivvit

SKILLS

Languages

Czech - Native speaker

English - Full working proficiency

German - Limited working proficiency

IT

Machine Learning, Data Processing, Scalability, Database systems (SQL, NoSQL), DevOps, Docker, Cloud, Git, Web technologies, POSIX, OSS

Languages: Python, GoLang, PHP, C++, JS

Other

Driving license class B

INTERESTS AND ACTIVITIES

Programming

Programming competitions, Distributed Storage, Rust lang, Bitcoin

Public speaking - tivvit.cz/talks

GDG ČVUT [since 2013] Event organizer - i.e. GDG Garage Prague

Sports

Ping-pong, Swimming, Extreme races (Spartan race)

Martial Arts - Systema, Karate (1.kyu) - 3rd-grade trainer, Allkampf-Jitsu (2.kyu), Kickbox (3.kyu)

Other

Digital Photography, Technology, Sci-Fi, TV Series, Go, Ant keeping

You may find latest version of my CV at tivvit.cz/cv and tivvit.cz/cv.pdf.