Petr Houška

houskape@gmail.com

EDUCATION

MSC. IN COMPUTER SCIENCE
Charles University | Prague
Sep 2017 - Feb 2021
Artificial Intelligence/Machine learning
GPA: 1.06 (1-4 | 1 is best)
MSc. thesis: see projects

BSC. IN COMPUTER SCIENCE
Charles University | Prague
Sep 2014 - Sep 2017
General computer science
GPA: 1.15 (1-4 | 1 is best)
BSc. thesis: @iolevel

LINKS

Github:// **petrroll**
LinkedIn:// **houskape**
Website:// **petrroll.cz**
Devblog:// **devblog.petrroll.cz**
Email:// **houskape@gmail.com**

SKILLS

Knowledgeable
C# • Python • MSIL

Proficient
C • TypeScript • Go • TensorFlow

Familiar
C++ • x86 Assembler • Java • CUDA
• PHP • F# •SQL • Haskell • Prolog
•TypeScript • Bash

Technologies used
DPDK • MPI • Aurelia • prestoSQL
• Thrift • Roslyn platform • Unity •
Docker • K8s • KQL • PyTorch • ...

Computer science
Approximation algos • ML • Deep
learning • Linear algebra • Software
architecture • Parallel programming
• λ-calculus • Logic programming •
Evolutionary algos • Linear
programming • Computers and
Cognitive Sciences • ...

LANGUAGES

Czech - Native proficiency
English - Full professional proficiency
German - Elementary proficiency

HOBBIES

Hiking • Cycling • Curling • Social
sciences • Theatre

EXPERIENCE

MICROSOFT | Software Engineer
Sep 2021 - now | SWE 2 | Prague, Czechia
- Driving K8s migration.

Dec 2020 - Sep 2021 | SWE 1 | Prague, Czechia
- Asynchronous service for delivering messages from cloud to clients.
- Service (.NET), clients integration (Cpp + wrappers), DevOps (K8s, ...).

CTM - CENTER FOR TALENTED MINDS | Instructor
Sep 2020 - May 2021 | Prague, Czechia
- Online programming course mentor for high-school children.

UBER | Software Engineer Intern
Nov 2019 - Feb 2020 | Aarhus, Dennmark
- Insight into ops. metrics: data visualisation, investigation, etc.
- Research into vertical scaling of container based services.

MICROSOFT | Software Engineer Intern
July - Sep 2019 | Redmond, USA
- DevDiv: Developer tools for managed languages.
- UX, arch., impl. for better discoverability of Roslyn refactorings.

July - Sep 2018 | Redmond, USA
- Design & impl. of a feature within DPDK based C app.
- Development of socket IPC between C and .NetCore apps (Thrift).

IOLEVEL | Part time software developer
Mar 2017 – Jun 2018 | Prague
- Developement of Peachpie compiler platform (PHP to .NET compiler).
- Github:// **peachpiecompiler/peachpie** | Website:// **peachpie.io**
- Design & impl. of lowering generator methods as part of bachelor thesis.
- Thesis text Github:// **petrroll/bachelor-thesis**

PROJECTS

DL ARCHS. FOR ANALYZING NEURAL DATA | MSc. thesis
- Application of deep-learning architectures to small noisy data-sets.
- Modeling early visual processing in mammalian brain.
- Code Github:// **petrroll/msc-neuro**, Text Github:// **petrroll/msc-thesis**

DEVBLOG | Notes from ML papers etc.
- Notes about ML papers, SWE blogs, ...
- Website:// **devblog.petrroll.cz**

GND-AI TOOLS | HCI tools for theatre performance
- Set of TTS, STT, text generation scripts using 3rd party services.
- Github:// **petrroll/gnd-ai-tools**

MINIRTS | minimalistic massive RTS
- High performance data oriented arch. based on Unity jobs system.

AWARDS & VOLUNTEERING

Year	Result	Description
2018	1st / 19	Avast Cyber Adventure team (5).
2018	559th/4856	Google hash Code 2018.
2017	1st / 10	Trend Micro CTF Prague team (3).
2016	70th/1054	2nd best Czech team in Google hash Code 2016.
2014 - 2017	KSP	CS seminar for high school students.
2015 - 2018	Kasiopea	Coding competition for high school students.