

# Petr Houška

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## EDUCATION

### MSC. IN COMPUTER SCIENCE

Charles University | Prague

2017 - Exp. Feb 2021

Artificial Intelligence/Machine learning

DL, classical ML, RL, Agent systems, ...

GPA: 1.06 (1-4 | 1 is best)

### BSC. IN COMPUTER SCIENCE

Charles University | Prague

2014 - 2017

General computer science

GPA: 1.15 (1-4 | 1 is best)

Bsc. thesis @iolevel

## LINKS

Github:// [petrroll](#)

LinkedIn:// [houskape](#)

Email:// [houskape@gmail.com](mailto:houskape@gmail.com)

Website:// [petrroll.cz](#)

## 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 •

Drupal7 • Docker • ...

### COMPUTER SCIENCE

Approximation algos • ML • Deep

learning • Linear algebra • Software

architecture • Parallel programming

•  $\lambda$ -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

### UBER | SOFTWARE ENGINEER INTERN

Nov 2019 - Feb 2020 | Aarhus, Denmark

- Compute service scaler team.
- Insight into op. 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 & architecture sol. for discoverability issues of Roslyn refactorings.

July - Sep 2018 | Redmond, USA

- Azure: Networking SLB team.
- 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

- Development 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](#)

### FIEDLER AMS | WEB DEVELOPER

Jul 2015 - Oct 2015 | České Budějovice

Jul 2013 - Sep 2014

- Core Drupal 7 modules (PHP): user hierarchy, API data.
- JS SPA for configuring IoT boxes (Aurelia Framework).

## PROJECTS

### ALBANIANCHALLENGE.ORG | REGISTRATION SYSTEM

- Modular registration system with bank integration based on GApps.
- Github:// [petrroll/ACRegistrationGAS](#)

### GND-AI TOOLS | HCI TOOLS FOR THEATRE PERFORMANCE

- Set of TTS, STT, text generation scripts using 3rd party services.
- Github:// [petrroll/gnd-ai-tools](#)

### KLAS STRUGGLE | WHEAT GENERATOR ART/GAME IN UNITY

- Persistent field full of user-generated individuals backed by firebase.
- Github:// [petrroll/klas-struggle](#)

### POWERPLANSWITCHER | WINDOWS10 DESKTOP BRIDGE APP

- MS Store rating: ~4.7/5, Free | WPF, Win32 interop.
- Github:// [petrroll/PowerSwitcher](#)

## AWARDS & VOLUNTEERING

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.

Last Updated on 19th April 2020