

houskape@gmail.com

# **FDUCATION**

### MSC. IN COMPUTER SCIENCE

Charles University | Prague 2017 - Exp. 2020/21 Artificial Intelligence/Machine learning DL, classical ML, RL, Agent systems, ... GPA: 1.06 (1-4 | 1 is best)

### **BS IN COMPUTER SCIENCE**

Charles University | Prague 2014 - 2017 General computer science GPA: 1.15 (1-4 | 1 is best)

### LINKS

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

# **SKILLS**

#### KNOWLEDGEABLE

C# • Python • MSIL

#### **PROFICIENT**

C • Javascript • 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 • ...

#### COMPUTER SCIENCE

Approximation algorithms • ML • Deep learning • Linear algebra • Software architecture • Parallel programming •  $\lambda$ -calculus • Logic 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, Dennmark

- 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

- 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

#### 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-AITOOLS** | 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.