

## &lt;/&gt; SKILLS

Advanced C++, Google Test, Git  
Intermediate Python, CMake, Qt, qmake, Java, Maven, TeamCity, Doxygen  
Elementary Unity, C#, Valgrind, SageMath, SVN, Vagrant, Ansible

## 🏢 EMPLOYMENT

**R&D Software Engineer, BTL Medical Technologies CZ**

Development and maintenance of an ECG signal processing library  
C++, Visual Studio

2017-11 — 2018-11  
Prague, Czech Republic

- Supervision of builds for two target platforms
- Cooperation with a team based in India
- Technologies: C++, Google Test, CMake, g++, TeamCity, Visual Studio 2015, GitLab, Ubuntu, Windows, JIRA, Doxygen, qmake, Qt Creator, C#, Python

**R&D Software Engineer, BTL India**

Development of a medical device  
C++, Qt 5.5, Linux

2016-09 — 2017-10  
Bangalore, India

- Setup of cross-platform build system, automated tests, code quality metrics, performance measurements
- Technical job interviews
- Cooperation with a team based in Czech Republic
- Technologies: C++, Google Test, g++, Qt 5.5, qmake, QML, Qt Creator, GitLab, Ubuntu, JIRA, TeamCity, gcov, LCOV, SonarQube

**Software developer, Hobrasoft**

Development of applications for Windows and Android  
Java, C++, Qt, Android

2015-10 — 2016-09  
Rožnov pod Radhoštěm, Czech Republic

- Design and development of two applications that deal with digital signatures extensively
- Prototype of a Qt-based Android app
- Technologies: Java, iText, Maven, NetBeans, C++, Qt 4.8, Qt 5, QML, OpenSSL, Qt Creator, Git, Phabricator, Windows, Ubuntu, Android

**Summer Student, CERN**

Extension of Clang Static Analyzer with additional checkers  
C++, Clang Static Analyzer

2013-07 — 2013-09  
Geneva, Switzerland

- Summer school combined with a practical project
- Technologies: C++, Clang Static Analyzer, Git, JIRA, Linux

**Software Design Engineer, Honeywell**

Development of a device that helps testing of aeroplanes  
C++

2012-04 — 2012-09  
Brno, Czech Republic

- Software development, code analysis, system verification planning, documentation, cooperation with a team in the United States
- Technologies: C++, Visual Studio 6, SVN, Serena Dimensions CM, Windows

## 🎓 EDUCATION

**Master of Theoretical Computer Science, Charles University**

- Master thesis: [Minimum representations of Boolean functions defined by multiple intervals](#)
- Main areas of interest: computational complexity, computationally hard problems, algorithms, artificial intelligence, robotics, computer game development, game studies

2012-09 — 2015-06  
Prague, Czech Republic

**Bachelor of Mathematical Informatics, Masaryk University**

- Bachelor thesis: [Rabin Games on Finite Graphs \[in Czech\]](#)

2008-07 — 2012-01  
Brno, Czech Republic

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## ★ PROJECTS

### Programmer, [Ratata](#)

A rhythm game for Windows

Unity, C#

- Collaboration of four creators of various backgrounds
- Created in 48 hours for [Global Game Jam 2019](#)

2019-01  
Prague, Czech Republic

### Creator, [nbspacer](#)

Replaces regular spaces in HTML documents with non-breaking spaces (&nbsp; ) where appropriate

Python

- Conservative (VCS-friendly) - leaves the rest of the document intact
- Supports two languages: Czech and English
- Hobby project

2016-05 — 2016-06  
Dolní Bečva, Czech Republic

### Programmer, [GeoSign](#)

Assists Czech land surveyors in digitally signing documents and sending them to cadastre offices

C++, Qt 4.8

- Created for Hobrasoft

2015-10 — 2016-09  
Rožnov pod Radhoštěm, Czech Republic

### Creator, [PDF Manipulation Utility](#)

A command-line tool for manipulation with PDF documents

Java, iText, Maven

- Supported operations: inspection of properties, adding a digital signature, attaching a file
- [Extensive project documentation](#)
- Created for Hobrasoft

2015-10 — 2016-09  
Rožnov pod Radhoštěm, Czech Republic

### Creator, [missls](#)

Tactical nuclear warfare party minigame

GameMaker: Studio

- Originally created in 48 hours for the game jam [Ludum Dare 32](#)
- [Placed in top 8 % in category Mood](#)
- Interesting features: minimalistic design, vector graphics, 2D planetary physics

2015-04  
Prague, Czech Republic

### Creator, [Static Analysis Suite](#)

Extension of Clang Static Analyzer with a custom checker

Clang Static Analyzer

- Feasibility study of replacement of Coverity with Clang Static Analyser
- Focus on multithreading bugs
- Created for CERN (group: [PH/SFT](#)) as a part of Summer Student Programme

2013-07 — 2013-09  
Geneva, Switzerland

### Programmer, [Magic Dance Dance Carpet](#)

A magic carpet flight simulator

Unreal Development Kit

- Collaboration of five students of various backgrounds
- Interesting features: dance pad controls, concave world
- Created for the course [Computer games development](#) at Charles University

2012-11 — 2013-11  
Prague, Czech Republic

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## ↪ SAMPLES

### [path\\_finding](#)

Visualization of A\* search

SageMath

2015-01

### [Stable roommates problem solver](#)

An exercise in constraint programming

Prolog, clpfd

- [Report](#)

2014-09

### [NokiaWebGL](#)

Extracts a 3D map of a large region from a Nokia service

Python

2014-06

### [Stationary analysis of one channel queueing systems](#)

A mathematical analysis of a class of queueing systems

Mathematical modeling, LaTeX, SageMath

2014-06

### [slnkctr](#)

slnkctr [slinky conductor] is a music toy that helps slinky jugglers to extend their performance with music.

C++, OpenCV

- [Report](#)

2014-05

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## 🏷 EXTRACURRICULAR

### Participant, [Global Game Jam 2019](#)

Unity

2019-01  
Prague, Czech Republic

### Attendee, [Game Developers Session](#)

Video game development

2018-12  
Prague, Czech Republic

### Attendee, [Agile Open Space](#)

SCRUM

2017-11  
Prague, Czech Republic

### Student, [Software Testing \(online course\)](#)

Python, Test driven development, Random testing

2016-04

### Expert in English, [Duolingo English Test](#)

2015-07

### Participant, [Ludum Dare 32](#)

GameMaker: Studio

2015-04  
Prague, Czech Republic