

</> 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 of a library for ECG signal processing 2017-11 — 2018-11
C++, Visual Studio 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 firmware for a medical device 2016-09 — 2017-10
C++, Qt 5.5, Linux 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, Hobrosoft

Development of applications for Windows and Android 2015-10 — 2016-09
Java, C++, Qt, Android Rožnov pod Radhoštěm, Czech Republic

- Design and development of a pair of applications that deal with digital signatures in PDF documents (GeoSign, PDFMU)
- Prototype of an 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

Evaluation of a static code analysis tool 2013-07 — 2013-09
C++, Clang Static Analyzer Geneva, Switzerland

- Combination of summer school and a practical project
- Evaluation of Clang Static Analyzer as an alternative to Coverity
- Extension of Clang Static Analyzer with additional checkers
- Technologies: C++, Clang Static Analyzer, Git, JIRA, Linux

Software Design Engineer, Honeywell

Development of a device that helps testing of aeroplanes 2012-04 — 2012-09
C++ Brno, Czech Republic

- Software development, code analysis, system verification planning, documentation, cooperation with a team based 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](#) 2012-09 — 2015-06
• Main areas of interest: computational complexity, computationally hard problems, algorithms, artificial intelligence, robotics, computer game development, game studies 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

AFFILIATION

Member, Sokratovské rozhovory z.s.

Undergoing a training to become a facilitator of Socratic dialogue 2018-11 — Present
Czech Republic

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

★ 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 () 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 submitting 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

- Supports inspection and modification of properties, digital signatures and attachments
- [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 custom checkers

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

↪ 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](#)

Mathematical analysis of a class of queueing systems

Mathematical modeling, LaTeX, SageMath

2014-06

[slnkcctr](#)

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

C++, OpenCV

- [Report](#)

2014-05

” TESTIMONIALS

[Karthick N G](#) (manager), BTL India

It was wonderful working together with you when I was at BTL. I remember our elaborate discussions and your piercing technical questions!
Your analytical approach and dedication to work make you a great asset for any software team.

2018-10

[Nikhil Augustine](#) (co-worker), BTL India

I just wanted to say a big Thank you at this moment, You may not have an idea of the amount you have influenced in my career. The working experience with you have made a big impact in the way how I approach the problems in our area of work.
I wish you all the best, Keep up the enthusiasm and dedication and keep inspiring others.

2018-11