

# Curriculum Vitæ – Péter Handbauer

Eötvös Loránd University, physicist  
C++/Python software developer  
Architectural engineer student at BME, PTE

Mobile: +36-30-324-0367  
E-mail: p.handbauer@gmail.com  
Web: http://loserock.web.elte.hu/



Academic skills from the field of physics and mathematics. Seven years industrial and more autodidact software development knowledge. Ongoing studies in the field of architectural engineering. Writer, visual and creative attitude, open minded for new areas.

## Personal details

*Birth:* Esztergom, February 3, 1987.

*Citizenship:* Hungarian

*Address:* 1133 - Budapest, Ipoly utca 16, Hungary

## Job experiences

2019, *GE Healthcare Hungary* as Teamleader of a JAVA dev team, working on medical CT/MR/radiology workstation platform, compliant with FDI/CE/ISO and other international medical developing and documenting standards.

2016-2019, *NNG Llc.* as Generalist iGO Software Developer at Global Auto OEM Business Unit.

Attending on a three month long innovative garage-project as a developer (project *Demo presented in CES 2019, Las Vegas*), related to self-driving cars, gaze-tracking by camera, keyword triggered voice recognition, custom building/service database (mainly OSM based), and used multiple technologies like JS, Python, RPC, C++.

Working with high quality automotive solutions on various platforms (x86, ARM, custom Android and Linux devices), developing and maintaining in C++/C++11 codes related with built-in navigation and connected systems, participating in one week workshop at the partner (in England). Organizing and presenting 8 weeks long advanced Python course for software testers in 2017 (see [public course files on GitHub](#)), presenting indoor lecture about "Stress handling in workplace" (called NNG Talks). Attending on developer courses (C++11/14, TDD, Design Patterns).

2015-2016, *3DHISTECH Ltd.* as Software Developer at Fluorescence Technologies group.

Enhancing the fluorescence parts of the SlideScanner software, redesigning and optimizing confocal image processing modules, consulting with University of Debrecen's FRET research group.

2012-2014, *3DHISTECH Ltd.* as Junior Developer (during 2012) and as a Software Developer (from 2013). Developer of pathological digital specimen scanners as a member of the Scanner SCRUM team, controlling cameras and stepper motors, developing various image processing algorithms and GUI elements; Developer of the "Pannoramic Confocal" aperture correlation microscope's calibration process and basic imaging system, controlling software; developing fluorescence imaging and image processing technics, algorithms. product overview: [http://www.3dhistech.com/pannорamic\\_confocal](http://www.3dhistech.com/pannорamic_confocal)

2010-2012, Eötvös Loránd University, Department of Atomphysics as student, R&D within "Támop" competition. Automatized morphological analysis of spiral galaxies from the Pan-STARRS project's data, as diploma thesis.

September of 2009, Eötvös Loránd University, LIGO/VIRGO gravitational wave conference in Budapest. Technical preparations of the conference, operation and maintenance of live and audio/video conferences, mediator tasks.

July of 2008, KFKI-SZFKI (Central Physical Research Institute, Solid State Physics Department). One month professional practice, using fast CCD cameras at granular material research, analysing measurements and datas, programming low level image processing software in C language in cooperation with American students.

2008-2011 and '14, Voluntary work at a Hungarian webradio's tracklist making system, and working as radioman.

2014-2016, Voluntary translation work at Tortoise-git project's Hungarian transifex team.

## Professional background

### *Education:*

*In progress:* Architectural Engineering studies - Budapest University of Technology and Economics (BME) (2019-2020, first two semester with 4.5 of 5 cumulative result) & University of Pécs Faculty of Engineering and Information Technology (PTE-MIK) in long distance course (2020-...)

Eötvös Loránd University, Faculty of Sciences (ELTE-TTK) - Budapest, Hungary.

*Physicist* (pre-bologna system), *Astrophysics* and *Biophysics* specialization (2005-2011), and Physics BSc final exam (january of 2015), title of thesis: *Developing of an aperture correlation confocal unit's imaging* (original Hungarian title: "Apertúra korrelációs konfokális egység képalkotásának fejlesztése")

Member of the Eötvös József Collegium (2005-2007.)

Klára Leővey High School - Pécs, Hungary (2001-2005)

### *Scientific publication:*

Swift follow-up observations of candidate gravitational-wave transient events. ApJS, 203, 28 (2012)  
P. A. Evans, J. K. Fridriksson, ... P. Handbauer et al. (<http://arxiv.org/abs/1205.1124>)

### *Language:*

Hungarian: mother-tongue

English: ECL exam level B2 (2005), business English course and job oriented usage

German: basic usage

### *Skills:*

#### *main programming skills:*

**C/C++** (7-8 years industrial experience)

**Python** (7-8 years light industrial development, 3-4 years experience from academic research)

additional: GoogleTest framework and TDD basics, Bash scripting, other minor experiences in Java, SQL, Pascal, Basic (also in C64), JavaScript, C#/.NET, HTML5

#### *main development experiences:*

Automotive and navigation solutions on x86 and ARM based hardware platforms (Linux, Android, Win32), produced to worldwide market (including Japan, EU and USA), working with speech recognition, TTS, electric vehicle, traffic and weather forecast systems, gaze-tracking for smart-car project, Google Places and OSM API, RPC based IPC.

Teamleading and consulting in international medical software development.

Digital image and signal processing, data analysis, automatizing of calibration processes, medical imaging in brightfield and fluorescence field of digital microscopy, CCD and sCMOS cameras, astrophysical image processing and database creation, controlling stepper motors and other hardware units, simulations, scripting, agile development (Scrum, Kanban), UML, a little OpenGL...

#### *additional skills:*

User and job experience on Windows, Linux and Mac OS X systems, Microsoft Visual Studio and various lightweight IDEs (VS Code, Atom, Sublime, Geany, PyCharm, VIM, XCode...)

VSC systems like git, svn and mercurial. Team and agile development tools like Jira, Confluence, github, cloud office solutions, virtual machines and test environments, shell scripting, SSH, SCP, Google Test and pytest.

## Misc

### *currently interested in:*

Advanced experience in Python 3.x, developing practices in Swift and Julia language, 3D space planning and rendering, CAD and digital art, innovative planning and developing tasks, architectural thinking.

### *some personal interest:*

Writing short stories and poems, guitar playing, singing, drawing, communication and conflict handling, psychology and philosophy, charitable and volunteer works.

Last update: February 19, 2021  
<http://loserock.web.elte.hu/>

