

# PETER HUSZAR

Software and hardware developer



## INFO

### ADDRESS

Budapest, Hungary

### PHONE

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### EMAIL

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### LINKEDIN

<https://www.linkedin.com/in/huszar-peter/>

### BLOG

<https://peterhuszar.medium.com/>

### ONLINE CV & WORKS

<https://peterhuszar.github.io/cv/>

## PROFILE

I graduated as an MSc electrical engineer. I worked as a software developer in the recent years. I am doing my PhD while working. My research focuses on the application of unmanned aerial vehicles. I have more than 3 years of experience in the aerospace industry of which 1 year was at the German Aerospace Center (DLR). I have expertise in both software and hardware development. I regularly give presentations on conferences and publish my articles.

## SKILLS

Software Development

Python 3 C uPython

Git Bitbucket JIRA

SonarQube Automated

VS Code Reporting

Source Code ECSS

Generating MISRA C

Drones Presentation

CubeSats Publication

Public Speaking Research

Hardware Development

PCB AltiumDesigner

Design Schematic Design

## EXPERIENCE

### Software Developer

Budapest, Hungary

2y 1m

### Complex Systems & Small Satellites (C3S) LLC.

As a software developer at C3S I spent most of my time implementing Python scripts and tools and I also participated in the embedded satellite C source code in the form of bug fixes and code maintenance. I performed measurements on the satellite hardware to verify the functionality of the embedded source code. Besides that my main task were to automate processes like code quality inspections and implement scripts which can be used to generate source code (C, Cpp, NodeJS), configuration files used for the satellite communication packets, reports and documentations. During our work we worked together closely with international partners such as the European Space Agency (ESA). I also participated in project preparation. I got entrusted to present the results of our company on a scientific conference and to take part in a paper on CubeSat development.

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**Hardware Developer**  
Budapest, Hungary  
1y 1m

**Thyssenkrupp E/E Competence Center**

At Thyssenkrupp my job was to develop, test and verify a new generation of steering systems intended to be used in self-driving cars. I designed the layout of the high current circuitry and I also took part in the design of the digital circuitry. I performed thermal measurements on the whole system in order to improve the layout. I started to use Python at Thyssenkrupp to collect data automatically with laboratory equipment during measurements, to condition and process the gathered data and finally to generate the required documentation and verify the results. I gained a lot of experience with thermal cameras, thermal chambers, special PCB technologies like IMS and high temperature FR4 and with Python scripting during the time I spent there.

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**Hardware Developer**  
Bremen, Germany  
1y 1m

**German Aerospace Center**

**(Deutsches Zentrum für Luft- und Raumfahrt - DLR)**

As a hardware designer intern my task was to design a three channel (X,Y,Z) high resolution ADC unit for seismic data acquisition, a main on board computer unit (OBC) with an ARM Cortex-M4 microcontroller, Wifi connection and other necessary peripherals, and finally an interface unit for the ROBEX (Robotic Exploration of Extreme Environments-Helmholz Alliance) project. I was responsible for the whole design and manufacturing process. I gained a lot of new experience with Altium designer and different kind of simulation programs, in the field of high resolution delta sigma ADCs and load cell amplifiers. I feel lucky to had the opportunity to work with a highly international team.

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**Electrical Engineer**  
Mriehel, Malta  
4m

**Hetronic Malta Ltd.**

As an intern I had quality assurance based tasks, jig and hardware designing with the aim of improving test methods and procedures. I learned a lot about production cell auditing and layered process auditing, quality control plans and how to make and improve these plans. Furthermore I experienced how to work and communicate with a culturally very diverse team.

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**DSP Laboratory Demonstrator**  
Budapest, Hungary  
1 semester

**Obuda University**

As a laboratory demonstrator I presented to younger engineering students how to use digital signal processors (DSPs), write small applications in assembly language and how to measure them properly. I gained a lot of useful experiences about teaching, encouraging, and dealing with others. I really enjoyed working as a demonstrator.

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## EDUCATION

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PhD  
Military Engineering  
Budapest, Hungary  
Present

**National University of Public Service**  
Doctoral School of Military Engineering  
**Research field:** Defense electronics, information technology and communication

MSc  
Electrical Engineering  
Budapest, Hungary  
2y

**Obuda University**  
Kando Kalman Faculty of Electrical Engineering  
**Specialization:** Electrical Machines and Electrical Power Converters, **Classification:** Outstanding

BSc  
Electrical Engineering  
Budapest, Hungary  
4y

**Obuda University**  
Kando Kalman Faculty of Electrical Engineering  
**Specialization:** Communication Engineering, Microwave Communication, **Classification:** Outstanding

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## AWARDS & HONORS

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Research Fellowship

New National Excellence Program of the Ministry for Innovation and Technology research fellowship granted for the academic year 2019/20. Research topic: **"Tools and possibilities of defending against drones"**

Special Prize

XXXIII. National Conference of Scientific Students' Associations, Conference Section: electronics, electrical measurement technology and telecommunications

Scholarship Granted by the Hungarian Republic

The Minister of Education awards the Fellowship granted by the Republic to students after at least two semesters of outstanding academic/professional achievement, working with unique success in the scientific students' circle

Special Prize

XXXII. National Conference of Scientific Students' Associations Conference Section: electronics, electrical measurement technology and telecommunications

2nd Prize

Obuda University XLIV. Scientific Students' Conference

2nd Prize

University of Timisoara XV. Scientific Students' Conference

1st Prize

Obuda University XXXVIII. Scientific Students' Conference

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## PUBLICATIONS

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Article	“Improving Communication Efficiency Between UAV and it's Ground Segment
Article	“Analysis of Ukrain's Crowdfunded Military Purpose Octocopters
Presentation	“Challenges of Defense Against Drones
Article	“Drone Remote Identification
Article	“Threats Against Drones from Cyberspace
Review Article	“The Potential of Fifth Generation Mobile Networks for Unmanned Aerial Vehicle Systems
Presentation & Article	“Cubesat Development from the Perspective of Versatility and Easy Reproducibility (Co-Author)
Blog Post	“DroneTech Conference in Toruń - My experiences in a nutshell
Blog Post	“2nd Drone Conference Budapest - A great product is just simply not enough to succeed in the commercial drone industry.

**Note:** For the abstracts, links and bibliographic information of the above publications, please visit the following subpage of my online CV: <https://peterhuszar.github.io/cv/publications>

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## CONFERENCES ATTENDED RECENTLY

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The Hague, Netherlands 2020.01.13.-16.	RPAS CivOps 2020 Conference, 8th Annual European Civil RPAS/Drone Operators & Operations Forum
Poland, Torun 2019.10.18-19.	Drone Tech World Meeting

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## LANGUAGES

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English - C1	I speak and write in english fluently. I understand highly technical and complex texts and lectures.
German - A1	During my internship in Germany I took online courses and I learned the basics but I have not used it recently.
Hungarian - native	

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