

# Tibor Herman

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## Curriculum Vitae

### Education

- 2021 – **PhD. Doctoral School of Electrical Engineering**, *Budapest University of Technology and Economics*.
- 2014 – 2016 **MSc. Broadband and wireless communications specialization**, *Budapest University of Technology and Economics*.
- 2009 – 2013 **BSc. High frequency systems and applications specialization**, *Budapest University of Technology and Economics*.
- 2004 – 2009 **Hungarian-English bilingual informatics programme**, *Gróf Széchenyi István Technical College, Székesfehérvár*.

### University Projects

- MSc Thesis Development of the Electrical Power System of SMOG-1 PocketQube satellite
- BSc Thesis RF frontend design of a multi-channel GPS receiver

### Work Experience

- Sept 2019 – **Assistant Research Fellow**, BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS.
  - Passive radar development
  - PocketQube satellite development
  - Assistant teacher
  - Drone pilot
- Sept 2019 – **Hardware Development Engineer**, QUINI KFT..
  - Radio communication hardware development
- Jul 2018 – **Hardware Engineer**, FREELANCER.
- Dec 2018 ○ High Altitude Balloon platform design
- Nov 2017 – **Staff Engineer, Automotive Radar Hardware**, BOSCH, Budapest.
- Sept 2019 ○ Radar measurement station design and buildup
  - Advanced Driver Assistance System development
- Sept 2014 – **Development Engineer**, SMOG-1 DEVELOPMENT TEAM, MŰEGYETEMI RÁDIÓ CLUB, Budapest.
  - Development of Primary Electrical Power System
  - Antenna deployment system development
  - Satellite 3D model design

- Feb 2016 – **Applications Engineer**, SILICON LABS, Budapest.
- Nov 2017
- Layout design of RF section for EFR32 wireless microcontrollers
  - RF validation of radio boards in anechoic RF chamber
  - Antenna matching for EFR32 radios
  - Design of automated testbench for RF test chamber
  - Embedded programming on Cortex M4 system
- Mar – Dec **Intern**, SILICON LABS, Budapest.
- 2015
- Layout design of EZ Radio Pro 2, EZR32 and EFR32 radios
  - Measurement and tuning of matching networks
- Jul – Aug **Summer internship**, SILICON LABORATORIES HUNGARY KFT., Budapest.
- 2014
- Development of wireless serial communication application, using the company's RF devices in C#
- Jul – Dec **Hardware developer and tester**, AITIA INTERNATIONAL, Budapest.
- 2013
- Development and testing of ultrasonic indoor positioning system
  - Low- and high-level programming of the hardware
- Sept 2009 – **Lab assistant**, NOKIA-SIEMENS NETWORKS, Budapest.
- Jun 2010
- Maintenance and installation of devices
  - Creating a database of the equipment of the lab

## Publications

- May 2016 **SMOG-1 student satellite for LEO spectrum analysis**, *poster*, Silicon Labs Technical Symposium, Austin, TX.
- May 2017 **2.4 GHz antenna matrix**, *poster*, Silicon Labs Technical Symposium, Austin, TX.

## Scholarships

- 2022-2025 **Cooperative Doctoral Program National Defense Sub-program.**

## Patents

**Attila Zólomy, Christopher L. McCrank, Eric Unruh, Tamas Bódi, Tibor Herman**, *Transmission line matching network and method therefor*, U.S. Patent 9780757B1, filed May 31, 2016, and issued October 3, 2017.

**Attila Zólomy, Tamas Bódi, Tibor Herman, Terry Lee Dickey**, *Apparatus with improved antenna isolation and associated methods*, U.S. Patent Application 20180159214A1, filed December 2016.

## Skills

- Basic HTML, Bash script
- Intermediate Altium, PYTHON, embedded C, C++/C#, MATLAB, Linux, L<sup>A</sup>T<sub>E</sub>X
- Advanced Soldering, KiCad