

# ESZTER BÁTHORY

## CONTACTS

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[LinkedIn](#)

## LANGUAGES

ENGLISH – Professional  
ITALIAN – Advanced  
HUNGARIAN – native  
SPANISH – Beginner

## SKILLS

Problem Solving,  
Critical thinking,  
Accuracy and Precision, both  
in a team and alone,  
Time Management,  
Reliability,  
Diligent Working Time,  
Version Control (SVN, git)  
MATLAB,  
C#,  
Unity3D,  
Python,  
Time Series Database,  
Arduino,  
Data Science,  
Open personality to acquire  
new competencies

## ABOUT ME

Reliable professional with strong interests in engineering, and innovations. Known for critical thinking, problem solving, and a proactive approach to seeking new challenges and opportunities in the biomedical field.

[Personal Website](#) | [Home projects](#)



## EDUCATION

**Budapest University of Technology and Economics**

**BIOCHEMICAL ENGINEER, B.Sc.** Healthcare specialization  
Faculty of Chemical Technology and Biotechnology  
*Sep 2015 – Jan 2019*

**BIOMEDICAL ENGINEER, M.Sc.** with honors  
Faculty of Electrical Engineering and Informatics  
*Sep 2019 – Jun 2021*

[LinkedIn certificates:](#) TensorFlow - NNs, NLP, Images, Deep Learning, Arduino, Business Analysis

[Programming Certificates:](#) [Unity3D](#), [Python](#), [Machine-Learning](#)

## PROFESSIONAL EXPERIENCES

- **Clario Clinical**, *Jun 2024 – Sep 2024*  
**Solution Design Analyst**, eCOA - remote

- **Femtonics Ltd. / BrainVisionCenter**, *Feb 2020 – May 2024*  
**Bioengineer - device, and software development**, *Jul 2023 – May 2024*

-Device and software development (Unity3D) on designing animal virtual environments for neuroscientific research. Oversaw the device functionality, maintenance, and technical testing. Played a crucial role in optimizing, creating protocols, and teaching the use of the devices.

-Enhanced device functionality through testing, and communication with teammates from different backgrounds.

-Real-time online feedback was developed for the GUI for more effective experiments and an augmented user experience.

Basic PLC knowledge,  
HTML documentations,  
Scripting,  
In vivo optogenetic  
manipulation in mice,  
Viral transfection,  
Multi-photon microscope  
user,  
Driving license,  
Efficient in multicultural  
environment,  
Mentoring

## Assessment Centers

- Linde, Pullach,  
Germany, 2024
- Telekom Deutsche,  
Hungary, 2025

-Managed software-hardware integration for in vivo animal experiment tasks.  
Developed internal documentation (Sphinx - HTML) and provided training material to international clients.  
-Advertisement and demonstration.  
-Insight into basic PLC programming, robotics, database queries, and GUI design.

### **Research Scientist** in neuroscience – *Initial role*

-Co-author of a [Nature Methods paper](#).  
-Device specialist at international and national conferences.  
-Presented research on poster sessions at conferences (OPTOGEN, IBRO, FENS),  
**contributing to ongoing neuroscientific investigations.**  
-Perform experiments and protocol designs for cortical signal processing studies, extended with data analysis.  
-Perform in vivo optogenetic manipulations, viral transfection with micropipette injections, mouse craniotomy surgeries, and active use of multiphoton microscopy (acoustic-optic 3D) in neurobiological research, and data analysis development.

- **Gottsegen National Cardiovascular Center**, Hospital, *Oct – Dec 2021*

#### **Instrument Engineer**

-Project management, handle logistics, serve coordination, and technical documentation for medical equipment projects.  
-Liaising with medical device companies and distributors for acquisitions and contracts.

- **OFESZ Molecular Diagnostic Laboratory**, *Jun – Sep 2021*

#### **Laboratory Assistant** (self-employment)

-Conducted PCR diagnostics and handled samples for in-vitro diagnostics.  
-Operated blood analyzers and chemical automation systems.

## EARLY CAREER & VOLUNTEERING

- **Hungarian Academy of Sciences, Research Center for Natural Sciences, Institute of Organic Chemistry, and Chemical Biology group,**

#### **Volunteer Researcher**, *Sep 2017 – Dec 2018*

-Preparative work with DNA oligomers, and performed measurements with spectrophotometry, capillary electrophoresis. -Data analysis and visualization.

- **Sanofi, Chinoi Zrt., Development project manager intern**, *Jun – Sep 2019*

- **Department of Otorhinolaryngology, Head and Neck Surgery, Internship**

-Project with cochlear implantation, and hearing aid devices.  
-Observe implant operations, intraoperative measurements, facilitate the tuning of the signal processor for patients.

- **Femtonics Ltd., Volunteer Junior Researcher** during the first year.

- Participation in [Scientific Student Conference](#) – **Role of Vasoactive Intestinal Polypeptide Expressing Interneurons in Cortical Signal Processing** (II. prize).