

### **CONTACTS**

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<u>LinkedInLink</u>

## **LANGUAGES**

ENGLISH – professional ITALIAN – advanced HUNGARIAN – native SPANISH - beginner

## **SKILLS**

Problem Solving,

Critical thinking,

Accuracy and precision, both in team and alone,

Time Management,

Reliability,

Diligent work time,

Version control (SVN, git),

MATLAB,

C#,

Unity3D,

Python,

Timeseries Database,

Arduino,

Data Science,

Open personality to acquire new competencies with cell culture,

# **ESZTER BÁTHORY**

## **ABOUT ME**

Reliable professional with strong interests in medical engineering, neuroscience and software development. Known for critical thinking, problem-solving, and a proactive approach to seeking new challenges and opportunities in technical fields.

Personal website: PersonalWebsite



## **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

## PROFESSIONAL EXPERIENCES

- Clario Clinical, Jun 2024 Sep 2024 Solution Design Analyst, eCOA - remote
- Designing charters for clinical trials in multicultural environments.
- Collaborating with clients and team members to ensure protocol compliance.
- 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.
- -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 designs.

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





#### Research Scientist in neuroscience – Initial role

### -Co-author of a Nature Methods paper.

#### **Article Link**

- 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

- -Handled logistics, served coordination, and technical documentation for medical equipment projects.
- -Liaised 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 human 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, Chinoin Zrt., Development project manager intern, Jun Sep 2019
- Department of Otorhinolaryngology, Head and Neck Surgery., Intern project
- -Project in biocompatible materials, 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).