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

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, Chinoin 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).