

Ladan Gocman Jiráček

Objective

To apply my background and experience in engineering, biophysics, and media presentation in order to advance and improve the field of Brain Computer Interfaces.

Experience (in order of relevance)

2018 Otto Neural Protheses Laboratory Gainesville, USA

Laboratory Technician

Developing and researching peripheral nerve implants
Characterizing devices using advanced Confocal and Lightsheet microscopy
Creating materials to aid in the training and advancement of those interested in Neural Interfaces
Assisting with animal experiments in both CNS and PNS

2012 Fraunhofer Institut für Zuverlässigkeit und
Mikrointegration (IZM) Berlin, Germany

Engineering Intern

Determining the mechanical damage inflicted on live brain tissue from neural array attachment.
Developing most effective thin film procedure for neural array cable.
Assisting others in experimentation and characterization of manufactured devices and films.
Determining strength and fatigue characteristics of neural array cables.

2011-2012 Blackrock Microsystems Salt Lake City, USA

Engineering Intern

Testing on neural sensing microarrays.

- Inductance and Capacitance characterizations using specialized testing equipment.
- Interpreting data correlations to optimize equipment.
- Assisting in training of lab users as needed.

Modifying testing equipment as requested and training users on method.
Writing Data/Process Verification and Work Instructions reports.
Finding solutions to problems using resources within company.
Developing experimental methods for novel neural array deinsulation techniques.

2015 Ghosh Nanoswimmers Laboratory Bangalore, India

Thesis work as Masters Student

Researching the effects of helical microswimmers within viscoelastic media
Learning processes of fabrication of helical magnetic microswimmers as well as best practices

- Manipulating swimmers in 3D using triaxial Helmholtz electromagnetic coils
- Using and editing LabView programs for best results

Data review and analysis of microswimmer swimming patterns
Developing experiments which prove microswimmers behave differently in viscoelastic versus Newtonian fluids

- Rewriting Matlab computer code to fully automate data analysis.

Education

Nanobiophysics Masters	Viscoelasticity Effects of Helical Magnetic Microswimmers	Thesis -
2013-2016	Technische Universität Dresden	Dresden, Germany

Mechanical Engineering B.S.	Making a Venous Decongestant Medical Device	Thesis -
Emphasis in Microsystems and Nanotechnology Minor in Nutrition	University of Utah	Salt Lake City, USA
2007-2013		

Characteristics

Entrepreneurial and Mould-breaking Spirit

- Runner-up in Bench to Bedside Medical Device Competition with prize of \$10,000
- Co-Founder of Alpaca Sweatshirt Imports with grant from U of Utah Entrepreneur Club
- Co-Founder and President of University of Utah Ninkasi Brewing Club.
- Host of the Neural Implant podcast talking to 60+ leaders in the BCI field
- Host of the Travel Wisdom podcast with 200+ guests on how travelling can be educational.
- Travelled to over 100 countries and have lived on 3 continents.

Dedicated to Constant Learning

- Conversational in English, Czech, Slovakian, Russian, German, Spanish, Polish.
- Actively seek out advice from coworkers and superiors on how to do job better and faster,
- 7 years drafting experience in 2-D and 3-D design in macro and micro scale devices.

Resilient and Hardworking

- Worked up to 20 hour shifts in office and warehouse environments.
- Endured (and enjoyed) 167 hour train ride from Vladivostok to Moscow on Trans-Siberian Rail.
- Able to travel in sub optimal conditions for extended periods of time
- 7 years Real Estate management experience for Best High Seas.

References

Dr. Kevin Otto
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