

Education

10. 2015 - ongoing Ludwig-Maximilians-Universität München, Germany
Max Planck Institute of Neurobiology, PhD Systemic Neurosciences
Supervisor: Dr. Ruben Portugues
8. 2018 Marine Biological Laboratory, Woods Hole MA, USA
Brains Minds and Machines Summer Course
7. 2017 Redwood Center for Theoretical Neuroscience, UC Berkeley, USA
Berkeley summer course in mining and modeling neuroscience data
10. 2013. – 9. 2015. Ludwig-Maximilians-Universität München, Germany
MSc Neurosciences
Thesis supervisors: Dr. Álvaro Tejero Cantero, Prof. Dr. Andreas Herz
2010. – 2013. University of Zagreb, Croatia
Faculty of Electrical Engineering and Computing
BSc in Electrical Engineering and Information Technology

Experience

2. 2015. – 3. 2015 Research internship at the **Max Planck Institute for Neurobiology**, Martinsreid group of Professor Herwig Baier: *regression-based analysis of calcium imaging data*
- building a framework for visual stimulation and automated experimental result analysis, establishing of data sharing protocols
8. 2014. – 9. 2014 Research internship at **Ludwig-Maximilians-University Munich** group of Professor Andreas Herz:
single-cell modelling of electrophysiology of stellate cells in the entorhinal cortex
- collaborating with an experimental group, building a GUI and employing genetic algorithms for exploring the parameter space of different ion channel properties
2. 2014. – 3. 2014 Research internship, **Technical University of Munich**, group of Professor Jörg Conradt:
neurally-inspired optic flow estimation from event-based datastreams
- processing data from a neuromorphic sensor, designing and implementing algorithms in C++; real time data visualisation
7. 2013. – 9. 2013 Research internship at **École polytechnique fédérale de Lausanne (EPFL)**
project in sparse coding at the LTS4 signal processing laboratory (Prof. Pascal Frossard)
- implementation of published algorithms in MATLAB, testing on standard datasets
10. 2010. – 7. 2013 Undergraduate teaching assistant on six subjects at the **Faculty of Electrical Engineering and Computing in Zagreb**
- helping students with lab work (electronics, instrumentation, programming)

Publications Štih V¹, Petrucco L¹, Kist AM, Portugues R. Stytra: an open-source, integrated system for stimulation, tracking and closed-loop behavioral experiments
bioRxiv (2018)

Knogler LD, Markov DA, Dragomir EI, Štih V, Portugues R. Sensorimotor representations in cerebellar granule cells in larval zebrafish are dense, spatially organized and non-temporally patterned. (2017)

Awards and achievements

2014/2015 scholarship of the German Academic Exchange Service (DAAD) in 2014/2015

2013 Josip Lončar award for excellence in studies (Faculty of Electrical Engineering and Computing, Zagreb, Croatia – 1st ranking by GPA out of ~250 students)

9. 2008 – 9.2013 scholarship of the City of Zagreb

2009. and 2010. member of the Croatian representation at the International Physics Olympiad (IPhO) in Mexico and Croatia

Skills and competences

languages fluent in English and German
basic French

programming languages Python, Julia and Matlab for signal processing, data analysis and modelling;
C++ in robotics (with OpenCV and ROS libraries), QT for GUI programming

software proficient in use of Adobe Photoshop, InDesign and Illustrator
LaTeX for document processing and layout
UNIX command line tools