# SAEED SALEHI

ssnio.github.io

@ saeeds@bccn-berlin.de

ssnio 

Fischerinsel 14, 10179 - Berlin, Germany



### **EDUCATION**

### M.S. in Computational Neuroscience **Bernstein Center for Computational Neuroscience**

Oct 2018 - Ongoing

Berlin, Germany

Running GPA: 1.1 (equivalent of A / very good)

### M.S. in Electrical Power Engineering **Brandenburg University of Technology (B-TU)**

iii Oct 2012 - Sept 2014

Cottbus, Germany

Final GPA: 1.1 (equivalent of A / very good)

## B.S. in Electrical Engineering

### Power and Water University of Technology (PWUT)

**Sept 2005 - Oct 2010** 

Tehran, Iran

#### **EXPERIENCE**

### Dynamic Stability Expert & Automator **50Hertz Transmission GmbH**

Oct 2014 - Sept 2020

Berlin, Germany

- Modeling and development of dynamic networks for stability and control studies
- Development of Python tool-chain for automation and Optimization of dynamic Stability Analysis (OSA)
- Member of European Connection Network Code (CNC) working group and co-author of multiple regulatory guidelines and a technical paper

### TA, Content reviewer & Waxer

### **NMA Computational Neuroscience summer school**

**J**une - July 2020

NeuroMAtch Academy!

# Research Assistant

#### **Ministry of Energy**

**2011 - 2012** 

Tehran, Iran

Developing the smart grid road map for energy market

### Teaching Assistant and Instructor **PWUT - B-TU**

**2008 - 2014** 

Tehran, Iran

TA for Linear Control Systems, Electrical Circuits, Electromagnetic and Power Electronics @ PWUT Instructor of CYME Dist and PSCAD @ PWUT Instructor of DIgSILENT PowerFactory @ B-TU

#### A more elaborate but less "stylish" CV: ssnio.github.io/about/

### **RESEARCH INTERESTS**

- What cost functions drive our attention, questions and exploration; and How is it optimized?
- Machine learning for and from Neuroscience
- Causal inference and robust learning

### LAB ROTATIONS



### Prof. Richard Kempter's Lab

Modeling ripple oscillations in networks of delayed inhibitory pulse-coupled oscillators



### Prof. Henning Sprekeler's Lab

Modeling motor cortex by training and analyzing recurrent neural networks



#### Dr. Wolf-Julian Neumann's Lab

EEG and ECoG signal processing for closed loop deep brain stimulation with focus on waveform

### **PUBLICATIONS**

- H. Urdal et al., "High Penetration of Power Electronic Interfaced Power Sources and the Potential Contribution of Grid Forming Converters" ENTSO-E joint technical report, 2019
- J. Weidner, R. Bauer, S. Salehi, "Control strategies of phase-shifting transformers in long term network development", International ETG Congress - Die Energiewende, Bonn, 2015
- M. S. Ghazizadeh, S. Salehi, and A. Shahmohammadi, "Design of Power System Stabilizer (PSS) based on Anchoring Zeros", accepted in Eighth IEEE International Conference on Control & Automation, 2010

### **STRENGTHS**

Dynamic network modeling, simulation and analysis

Bayesian inference

Control theory

Programming

Eager to learn & teach

### PROGRAMMING LANGUAGES

Python (+ few scientific libraries) C++, Julia, VBA and PyQt DIgSILENT Sim. and Prog. Languages



#### NATURAL LANGUAGES

Persian English German

