

# SAEED SALEHI

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## 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)

Oct 2012 – Sept 2014 Cottbus, Germany  
Cumulative 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

June – 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/](https://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 ● ● ● ● ●