PERSONAL INFORMATION



Sara Siamak

0

Shiraz, Iran



s.siyamak@shirazu.ac.ir or s.siyamak2016@gmail.com

+989174331697

EDUCATION

Sep 2016 – Feb 2020

M.Sc. Student in Electrical Engineering, Control

School of Electrical and Computer Engineering, Shiraz University, Shiraz, Iran

Overall GPA: 16.84/20.00

Thesis: "GPS Spoofing Attack Detection in Power Grid and Presenting a Defense

Scenario Against It" (Degree: Excellent)

Supervisor: Dr. M. Dehghani (mdehghani@shirazu.ac.ir)

Sep 2010 - Sep 2014

Bachelor of Science, Electrical Engineering, Control

Shiraz University of Technology, Shiraz, Iran

Overall GPA: 16.81/20.00

BSc. Project title: "Identification of Nonlinear Systems Using Fuzzy Hammerstein

Models" (Grade: 19/20.00)

Sep 2006 – Sep 2010

High School Diploma in Mathematics and Physics

Overall GPA: 19.73/20.00

PUBLICATION

Dec 2019

S. Siamak, M. Dehghani, and M. Mohammadi, "Counteracting GPS Spoofing Attack on PMUs by Dynamic State Estimation," in *2019 Smart Grid Conference (SGC)*, pp. 1–5. IEEE, 2019. (in Tehran, Iran, organized by Sharif University of Technology.)

Jun 2020 (Accepted)

S. Siamak, M. Dehghani, and M. Mohammadi. "Dynamic GPS Spoofing Attack Detection, Localization, and Measurement Correction Exploiting PMU and SCADA." *IEEE Systems Journal* (2020).

May 2020

M. Sabouri, **S. Siamak**, M. Dehghani, M. Mohammadi, and M. H. Asemani. "Intelligent GPS Spoofing Attack Detection in Power Grids." *arXiv preprint arXiv:2005.04513* (2020).

RESEARCH EXPERIENCE

Jul 2019-Feb 2020

Designing a micro Phasor Measurement Unit (µPMU)

A system similar to the operation of the PMU network and its connection to the control center has been designed. This system, like the PMU, receives GPS data and tags them into phasor data measured from a power system, in this study data is getting from DIgSILENT software. Then, through wireless communication, the prepared data are sent to a control center. In the control center, an application is designed that data has the ability to detect and correct PMU data under multi GPS spoofing attack by the neural network approaches.

Supervisor: Dr. M. Dehghani, Shiraz University, Shiraz, Iran.

Team work with Mohammad Sabouri.

COMPUTER SKILLS

 $\label{eq:matlab} MATLAB/SIMULINK, Python, Arduino, LabVIEW, PLC \\ Office, LaTeX$ **Technical Software:**

Public Software:

INERESTS

Power System, Cyber Security of Power Systems, Control Systems, System Identification, Robotic