# Jasmin Šećić

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## Profile

A very responsible person who loves solving problems. I have exceptional motivation for learning. I always strive to have a deep knowledge of everything I do. I am very interested in working remotely.

## Education

**Bachelor of Science**

**Faculty of Electrical Engineering** | Power Networks and Systems | 2014 – 2018 | 8.3/10

Bachelor thesis : "Dynamic voltage restoration" -- The main goal of this work was to describe the most common disturbances in the power supply voltage, specify the standards that relate to the voltage characteristics, present some technical solutions for the improvement of voltage characteristics, and afterward present the dynamic voltage restorer (DVR). The structure of the DVR is described in detail, its operating regimes, methods of voltage compensation, and DVR control modes. Also presented is the compensation range's dependency on the technical characteristics of DVR components, and at the end a simulation of its operation in a medium voltage network is demonstrated.

**Master of Science**

**Faculty of electrical engineering** | Power Networks and Systems | 2019 – 2021 | 9.8/10

Master thesis: "State of charge estimation for Lithium-ion battery using Feed forward neural network" The primary objective of this work was to introduce a State of Charge (SoC) estimation method based on a Feedforward neural network. The method is applied to practical data obtained from testing the Samsung INR21700 - 30T 3.6V 3000mAh battery. Additionally, the paper discusses the role of batteries as power storage systems, with a focus on Li-ion batteries. It concludes with an overview of battery management systems (BMS) and the methods utilized for SoC estimation. Practical part included the following tasks:

- Define input and output data for training and testing neural networks
- Statistical analysis of a dataset containing over 1 million samples of Panasonic 3Ah battery using pandas (Python library)
- Data scaling and normalization using custom Python scripts
- Calculating of correlation coefficients and creation of the heat map
- Creating, training, and testing feed-forward neural networks by adjusting different network parameters using Matlab toolbox NN tool
- Visualization of prediction accuracy and error calculation

## Experience

**Associate engineer for information and communication technology** | Power utility of Bosnia and Herzegovina | June 2019 – June 2020 | Sarajevo, Bosnia and Herzegovina

Main tasks:

- Configuration of remote reading of industrial meters
- Analysis of daily reports of remote meter readings
- Creation of primary substations 110/x kV for SCADA…

**Junior software developer** | Cape Ann Enterprises | July 2022 – September 2022 | Tuzla, Bosnia and Herzegovina

## Skills

- Very good knowledge of Python and libraries like pandas, numpy, matplotlib and some knowledge of Django framework
- Solid knowledge of C programming language
- Solid knowledge of Matlab/Simulink
- Experience with statistical analysis of complex datasets
- Familiar with linear programming methods for optimization
- Experience with Jupyter notebook
- Experience with artificial intelligence and algorithms
- Strong knowledge of power system and all its components: Generation, Transmission and Distribution
- Experience using PSS/E for power flow analysis, short circuit simulation and voltage profile analysis
- Good knowledge of distributed power sources
- Experience with manipulating, cleaning and visualizing data using Python
- Strong knowledge of Ms Office
- Experience working with databases (PostgreSQL)
- Strong math skills
- Searcher for simplicity