Behnam AKBARI

26.11.1993
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EDUCATION

06.2019 – Present | PhD in Energy and Process Engineering | ETH Zurich, Zürich
GPA: 6 / 6 | Sustainable energy systems optimization: Flexibility in integrated power and gas networks

09.2016 – 08.2018 | MSc in Power Systems Engineering | Sharif University of Technology, Tehran
GPA: 18.92 / 20 | Power quality enhancement in distribution systems using feeder reconfiguration and passive filter switching

09.2012 – 07.2016 | BSc in Electrical Engineering | Sharif University of Technology, Tehran
GPA: 17.98 / 20 | Design, simulation, and assembly of a 3-phase dynamic voltage regulator

PRACTICAL EXPERIENCES

02.2021 – Present | Research Assistant | Reliability and Risk Engineering Lab, ETH, Zürich
- Adaptive robust optimization of power and gas networks scheduling
- Assessment of power-to-gas and seasonal storage in the Swiss energy transition
- Collaboration with researchers from the Energy Science Center
- Supervision of eight student research projects
- Academic and outreach presentations and publications

09.2018 – 04.2019 | Microcontroller Programmer | RMS-Electronics Company, Tehran
PI controller design and implementation with DQ transform for a dynamic voltage regulator

08.2017 – 05.2019 | Electrical Engineer | Yekta Behineh Tavan Company, Tehran
Power quality studies for transmission and distribution system operators and industries

09.2014 – 12.2016 | Teaching Assistant | Sharif University of Technology, Tehran
Courses: Logic Circuits & Lab, Energy Conversion I, and Fundamentals of Electrical Engineering

SKILLS

Programming MATLAB, Python, C, Git
Software Gurobi, QGIS, LaTeX, MS Office, Simulink, PSCAD, PowerFactory

LANGUAGES

English Proficient
German Conversational (B1)

EXTRACURRICULAR ACTIVITIES

09.2021	Summer School on Optimization and Control in Infrastructure Networks | EPFL, Lausanne
02.2021 – 03.2021	Project Management for Research Course | Cubisma GmbH, Zürich
10.2015 – 07.2016	Professional Self-Analysis Course | Sharif Career School, Tehran
2014 – 2015	Organizing tours to power plants and manufacturing companies | Tehran

HONORS

2022	Received best student paper award at ENERGYCON 2022
2018	Graduated with top GPA in Power Systems Engineering major
2016	Directly admitted to master's program based on top BSc GPA
2016	Distinguished BSc project in the Electrical Engineering Department
2016 – 2017	Received National Elite Foundation's educational awards
2016	Placed in the top 0.1% in two nationwide university entrance exams

SELECT PUBLICATIONS AND PRESENTATIONS

B. Akbari, P. Gabrielli, and G. Sansavini, "Gas flow models and computationally efficient methods for energy network optimization," *Ind. Eng. Chem. Res.*, Mar. 2024.

B. Akbari and G. Sansavini, "Robust scheduling of integrated electricity and gas systems: A cost and flexibility assessment," SSRN, preprint, 2023.

B. Akbari and G. Sansavini, "Adaptive robust AC optimal power flow considering intrahour uncertainties," *Electric Power Systems Research*, vol. 216, p. 109082, Mar. 2023.

B. Akbari, *et al.*, "Optimal deployment of hydrogen and gas storages for seasonal balancing in the Swiss energy system," *PATHFNDR Annual Workshop*, Siemens, Zug, Switzerland, Sep. 2023.

B. Akbari and G. Sansavini, "Sequential second-order cone programming for AC load maximization problems," in *IEEE International Energy Conference (ENERGYCON)*, May 2022.

B. Akbari, H. Mirnezhad, and M. Parniani, "Optimal reactive power planning in active distribution systems for steady-state and transient characteristics improvement," *27th International Conference on Electrical Engineering (ICEE)*, Apr. 2019.

H. Azadi, B. Akbari, and M. S. Sepasian, "Power quality enhancement in distribution systems using feeder reconfiguration," *2018 Smart Grid Conference (SGC)*, pp. 1–6, Nov. 2018.

PERSONAL INTERESTS

Traveling, weight training, listening to podcasts, reading about energy trends

REFERENCES

Available upon request