

Behnam AKBARI

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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 | MS Office, LaTeX, PowerFactory, Simulink, PSCAD, Gurobi, QGIS

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** and G. Sansavini, "Robust scheduling of integrated electricity and gas systems: A cost and flexibility assessment," *International Journal of Electrical Power & Energy Systems*, Sep. 2024.
- B. Akbari**, C. Zhang, and G. Sansavini, "Short-term security assessment of natural gas supply in the European Union and policy insights," *European Safety and Reliability Conference*, Jun. 2024.
- T. Kopka, **B. Akbari**, A. Oneto, and G. Sansavini, "Assessing maximum grid loadability under PV deployment for distribution planning support: A Swiss case study," *CIREN 2024 Vienna Workshop*, Jun. 2024.
- B. Akbari**, J. Garrison, E. Raycheva, G. Sansavini, "Flexibility provision in the Swiss integrated power, hydrogen, and methane infrastructure," *SSRN*, preprint, 2024.
- 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, "Adaptive robust AC optimal power flow considering intrahour uncertainties," *Electric Power Systems Research*, Mar. 2023.
- B. Akbari** and G. Sansavini, "Sequential second-order cone programming for AC load maximization problems," *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)*, Nov. 2018.

PERSONAL INTERESTS

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

REFERENCES

Available upon request