

Orkhan Karimzada

EXPERIENCE

FROM SEPTEMBER 2019 – CURRENT

RESEARCH FELLOW, HITACHI LTD., TOKYO, JAPAN

Designing SiC based DC-DC converter for EV fast charging application.

SEPTEMBER 2017 – DECEMBER 2018

ADJUNCT LECTURER, ADA UNIVERSITY, SCHOOL OF INFORMATION TECHNOLOGIES AND ENGINEERING

Teaching “Introduction to Electronics” and “Human Computer Interaction” course to BS students.

OCTONER 2016 – DECEMBER 2018

ASSOCIATE DEAN & LECTURER, AZERBAIJAN STATE UNIVERSITY OF OIL AND INDUSTRY, FACULTY OF POWER ENGINEERING

My key task is to develop renewable energy projects and managing ongoing research projects on different topics including solar energy, marine(wave) energy and magnetic levitation. Also, I am responsible for Start-up projects in department. Teaching “Intro to Electronics”, “Renewable Energy Sources” course to BA students.

OCTOBER 2014 - OCTOBER 2015

ENERGY SPECIALIST, STATE AGENCY ON ALTERNATING AND RENEWABLE ENERGY SOURCES (SAARES)

Primary responsibility was to provide the technical support on renewable energy. Ensured that projects were progressing in adherence to the objectives and goals. Keep a current oversight on the projects, I would make regular visits to the project areas. Represented SAARES at events and meetings. Prepared information and data to be utilized in annual work plans and progression reports.

DECEMBER 2012 - MARCH 2013

INTERN, STATE OIL COMPANY OF AZERBAIJAN REPUBLIC (SOCAR), IT & COMMUNICATION DEPARTMENT

My key task was to collaborate within a team to develop the software for hotline services (#104 and #185) of Azerigaz CJSC

EDUCATION

FROM NOVEMBER 2018

PHD CANDIDATE, ELECTRICAL AND ELECTRONIC ENGINEERING, SAPIENZA UNIVERSITY OF ROME

My research area focused on development of grid connected power inverters based on wide band gap semiconductor with innovative control algorithms for renewable energy applications.

NOVEMBER 2016

MSC SUSTAINABLE ENERGY FUTURES, IMPERIAL COLLEGE LONDON

Thesis: “Commercial Framework and Risk Management for Virtual Power Plants”.

DECEMBER 2014

MSC ELECTRICAL ENGINEERING, AZERBAIJAN STATE UNIVERSITY OF OIL AND INDUSTRY

Graduated with Summa Cum Laude

AUGUST 2014

BS ELECTRICAL AND ELECTRONIC ENGINEERING, KOREA ADVANCE INSTITUTE OF SCIENCE AND TECHNOLOGY (KAIST)

AUGUST 2010

BS POWER ENGINEERING, AZERBAIJAN STATE UNIVERSITY OF OIL AND INDUSTRY

Graduated with Summa Cum Laude

Advanced Trainings

DECEMBER 2018 (2 WEEKS)

ENTERPREUNERSHIP IN RENEWABLE ENERGY, IMPERIAL COLLEGE LONDON, UK

JANUARY 2015 (2 MONTH)

PROMOTION AND DISSEMINATION OF BIOMASS UTILISATION TECHNOLOGY, HIROSHIMA, JAPAN

APREL 2015 (3 MONTH)

SOLAR PHOTOVOLTAIC APPLICATIONS FOR DEVELOPING COUNTRIES, BEIJING, CHINA

SELECTED PUBLICATIONS

- Design of a DC-DC Converter using SiC Trench MOSFETs for EV Fast Chargers – 2020 (Japan)
- Commercial Framework and Risk Management for Virtual Power Plants – 2016 (London, UK)
- Impact of the Non-Energy sectors diversification on the energy dependency mitigation: Visualization by the “IntelSymb” software application – 2016 (Spain)
- The method of determination sizes of electromagnetic devices winding by considering the principle of proportionality (IEEE) – 2013 (Malaysia)

A full list of my publications can be viewed on my LinkedIn profile

EXTRA CURRICULAR ACTIVITIES

JANUARY 2017 – AUGUST 2018

- **“NATURE FRIENDS” YOUTH ORGANIZATION**, BOARD MEMBER

DECEMBER 2017 - DECEMBER 2018

- **AZERBAIJAN UK ALUMNI ASSOCIATION**, DEPUTY CHAIRMAN

OCTOBER 2012 - AUGUST 2014

- **“BUTA” AZERBAIJAN – KOREA STUDENTS ORGANIZATION**, BOARD MEMBER

SEPTEMBER 2007 - JUNE 2010

- **STUDENT YOUTH ORGANIZATION AT ASOIU**, BOARD MEMBER

SKILLS

Languages: Azerbaijan (Native), English (Fluent), Turkish (Fluent), Russian (Fluent), Korean (Intermediate)

Programming Languages: Python, C, C++, C#

Simulation Tools: MATLAB, PSpice, Simulink, PVSyst, AIMMS, DIgSILENT PowerFactory, Altium Designer, Ltspice

REFERENCES

Available on request