EDUCATION

Email: liuziyi@sjtu.edu.cn Mobile: (+86)18516566522

9/2014-6/2019 (Expected)

Shanghai Jiao Tong University, Overall GPA: 84/100

Candidate for B.Eng in Alternative Energy Science and Engineering, School of Mechanical Engineering

• Core Courses: Photovoltaics Science (A), Wind Energy Principle and Technology (A), New Energy Systems and Their Applications (A^+) , Energy Economics (A), Energy Chemistry (A), Fundamentals of Management (A), Calculus II (A^-) , Probability and Statistics (A^-) , etc.

Technical University of Denmark, Exchange Student

9/2017-6/2018

Acquired 55 ECTS under MSc programme in Sustainable Energy: 42003 Energy economics, markets and
policies, 42002 Modelling and analysis of sustainable energy systems using operations research, 41416 Energy
systems - analysis, design and optimization, 42372 Life cycle assessment of products and systems.

RESEARCH WORK

Valuation of the System Advantages of Lower District Heating Temperatures

2/2018-6/2018

Individual Project, DTU Mechnical Engineering

Supervisor: Prof. Brian Elmegaard

- Analyzed the performance of various utility plants, distribution grids and domestic installations under different district heating (DH) temperature
- Developed an Excel-based model for *Sweco* to perform system valuation of DH covering financial, environmental, energy and socio-economic aspects. *Report*

An in-depth Analysis of Key Design Parameters of the Silicon Solar Cell

2/2017-1/2018

Research Assistant, SJTU Energy Research Institute

Supervisor: Prof. Qinqchun Yu

- Simulated and obtained the optimal magnitudes of silicon solar cell key parameters with PC1D program
- Analyzed the carrier transmission mechanism behind and compared results with a commercial product so that verified the reliability of PC1D.
- Publication: https://doi.org/10.1016/j.ijleo.2018.02.102

The Study of Collaborative Design with Multi-disciplinary BIM Softwares

2/2016-3/2017

Team Leader, SJTU BIM Research Center

Supervisor: Prof. Xueyuan Deng

- Took charge of HVAC modelling of SJTU library and coordinated architecture and structure modelling
- Explored the workflow communication among multiple softwares based on BCF and IFC standards
- Won the First Prize out of 434 competitors in The 5th National Building Information Modeling Contest

Course Projects

Optimal Dispatch of Heat and Power Producer in the Day-ahead Market

11/2017-12/2017

Group Leader

Proposed by Ea Energy Analyses

• Achieved optimal energy dispatch of various utility plants, i.e. CHP, NG boiler, solar plant and heat storage, with GAMS under day-ahead electricity market to serve the heat load of a large industry. *Report*

Life Cycle Assessment of Decentralised Toilets

9/2017-12/2017

Core Member

Proposed by NP Flint and supervised by DTU QSA

• Quantified the environmental impact of decentralised toilets in comparison with flushing and composting toilets with SimaPro, thus identifying the hotspot stage to improve current design. Report

The Photovoltaic System Design for a 100% Solar-powered House

9/2016-1/2017

Individual Project

Supervised by Prof. Xiaoqiang Zhai

 Designed and simulated the PV system applied in a double-decker, 100% solar-powered house with PVsyst and contributed to Team SJTU-UIUC for Solar Decathlon China 2018

Professional Experiences

BD/Analysis Intern, ENGIE China

9/2018-Present

• Conducted the study on China biomass fuel market, especially focusing on solid biomass for heat & power at Global Energy Management (GEM)

Research Assistant, Shenzhen Institute of Building Research

7/2018-10/2018

- Worked for an national program cooperated with Berkeley Lab (US) to investigate city-level solutions for energy saving and carbon reduction and thereby propose policy recommendations for cities in China
- Specifically compared 8 recognized tools & 9 indicator systems and analyzed over 100 policies' attributes

Student Assistant, Otago Polytechnic

8/2016

• Optimized economic benefits of PV panels in the new campus with Excel through different products and layouts and meanwhile participated in The Dunedin-Shanghai Sister City Education Scholarship Programme

AWARDS

Suzhou Education Scholarship (Top 3%)	10/2017
Ranking 1/28 in the major, 9/441 in School of Mechanical Engineering during 2016-2017 aca	$demic\ year$
The Excellent Student of Shanghai Jiao Tong University (Top 5%)	10/2017
The Excellent Student Leader of Shanghai Jiao Tong University	5/2017
Honored Mention, American Interdisciplinary Contest in Modeling	4/2016

SKILLS

Technical: Energy System Modeling, Life Cycle Assessment, Data Analysis, PV System Design

Software: LATEX, GAMS, SimaPro, PVsyst, R, MS Office, Photoshop, Premiere, ect.

Professional: Teamwork, Project management, Innovation Language: English - IELTS 7.0 (L:7.5 R:8.5 W:6.5 S:6.0)

MISCELLANEOUS

Cofounder, SJTU Sustainable Campus Initiative (Promoting and practicing the SDGs)	3/2018-Present
Oikos Develop Prize - Social Entrepreneurship Competition at Copenhagen Business School	5/2018
Chr. Hansen Sustainable Development Case Competition	4/2018
President, SJTU International Communication Association	5/2016-6/2017
International Master of Environmental Policy Summer Camp in Duke Kunshan University	8/2017