

EDUCATION

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## Delft University of Technology, Master of Science, Netherlands

9/2019–8/2021 (Expected)

Programme: Complex Systems Engineering and Management (Energy&Industry)

Honours: Sino-Dutch Scholarship awarded by the Dutch Ministry of Education, Culture and Science

Shanghai Jiao Tong University, Bachelor of Science in Engineering, China

9/2014-6/2019

Major: Alternative Energy Science and Engineering, School of Mechanical Engineering

Honours: SJTU Excellent Graduate (Top 20%), Suzhou Education Scholarship (Top 2%), SJTU Merit Student (Top 5%), SJTU Excellent Student Leader, Dunedin(New Zealand)-Shanghai Sister City Scholarship, etc

Technical University of Denmark, Exchange Student, Copenhagen

9/2017-6/2018

Acquired 35 ECTS under MSc Sustainable Energy–System Analysis Track: 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

Duke Kunshan University, Summer Session, China

8/2017

Environmental Policy Boot Camp: Environmental Economics, Statistics and Academic Writing

## Professional Experiences

#### Shanghai Electric, Research Assistant, Shanghai

11/2018-6/2019

A Chinese multinational power generation and electrical equipment manufacturing groups

- Worked for the Digital Power Plant project to realize condition monitoring and fault diagnosis of steam turbines through data mining and knowledge discovery
- Responsible for the development of the data preprocessing algorithm & process to address data redundancy, anomaly detection and data imputation

### ENGIE, BD/Analysis Intern, Shanghai

9/2018-2/2019

A French multinational energy and services group leading low-carbon power generation and customer solutions

- Actively tracked market intelligence relevant to solid biomass fuel in China and participated in due diligence of two target M&A firms through desk research and site visit
- Conducted the study on China biomass market from supply sustainability to operation safety, from competitive benchmarking to enabling policies

### Shenzhen Institute of Building Research, Research Assistant, Shanghai

7/2018–11/2018

The Shanghai Research&Innovation Center focuses on studying and consulting about sustainable cities and communities

- Worked for a national research program cooperated with Berkeley Lab (US) to investigate city-level solutions for energy saving and carbon reduction
- Specifically compared 8 tools & 9 indicator systems, analyzed 50+ policies' attributes, delivered 100+ pages' report and proposed policy recommendations for cities in China

### RESEARCH & PROJECTS

## Valuation of the System Advantages of Lower District Heating Temperatures

2/2018-6/2018

Individual Project, DTU Mechnical Engineering & Sweco

Supervisor: Prof. Brian Elmegaard

- Analyzed the performance of various utility plants, distribution grids and domestic installations under different district heating (DH) temperatures
- 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. Qingchun 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 as to verify the reliability of PC1D.
- *Publication:* https://doi.org/10.1016/j.ijleo.2018.02.102

# 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* 

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

9/2016-1/2017

Solar Decathlon China 2018

Supervised by Prof. Xiaoqiang Zhai

• Designed and simulated the PV system applied in a 100% solar-powered house with PVsyst including plane orientation & tilt, module & inverter selection and array layout for Team SJTU-UIUC.

# Skills

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

Program: MS Office, Python, LATEX, HTML, GAMS, SimaPro, PVsyst, Photoshop, Premiere

Language: English - IELTS 7.0 (L:7.5 R:8.5 W:6.5 S:6.0)

# Miscellaneous

<b>Cofounder</b> , SJTU Sustainable Campus Initiative ( <i>Promoting and practicing the SDGs</i> )	3/2018-6/2019
Oikos Develop Prize - Social Entrepreneurship Competition at Copenhagen Business School	5/2018
Chr. Hansen Sustainable Development Case Competition(SDG 12)	4/2018
President, SJTU International Communication Association (Over 60 members)	5/2016-6/2017
International Master of Environmental Policy Summer Camp in Duke Kunshan University	8/2017
Palliative Care Volunteer, Shanghai Longhua Hospital	9/2015-1/2016
Hobbies: Photography, Travelling, Swimming, Badminton, Singing	

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## 教育经历

荷兰代尔夫特理工大学,理学硕士,复杂系统工程与管理(能源&工业)

2019.9-2021.7 (预计)

• 中荷奖学金 (Sino-Dutch Scholarship), €16113/年

上海交通大学, 工学学士, 机械与动力工程学院新能源科学与工程

2014.9-2019.6

所获荣誉:上海交通大学优秀毕业生(前20%),校三好学生,校优秀团干部,苏州育才奖学金(校一等,前2%),第二届大学生头脑奥林匹克创新比赛三等奖等

丹麦技术大学, 校际交换生, 修读 MSc Sustainable Energy 能源系统分析课程

2017.8-2018.7

新西兰奥塔哥理工学院, 达尼丁-上海友好城市教育奖学金项目

2016.8

### 实习经历

研究助理,上海电气电站集团汽轮机厂,上海

2018.12-2019.6

- 中国大型综合性装备制造集团,主导产业聚焦能源装备、工业装备、集成服务
- 参与"数字化电厂系统设计及实现"课题,通过数据挖掘以实现汽轮机故障预测和诊断
- 负责汽轮机运行大数据前处理系统的算法开发与优化,包括数据去冗余、异常检测、插补预测等商业分析实习生,ENGIE中国,上海
  2018.8-2019.2

法国能源领域跨国集团,全球财富百强企业;提供可持续、低碳的综合能源解决方案

- 在 Global Energy Management (GEM) 部门进行中国生物质成型燃料市场的研究, 进行实地考察、专家访谈、文献阅读等, 形成阶段性调研报告
- 对全产业链进行可行性分析,从原料供应的稳定性、工厂运营安全性,到下游需求、竞争对手、政策环境等,阐述市场潜力和风险,辅助投资决策

研究助理,深圳市建筑科学研究院上海研创中心,上海

2018.7-2018.11

国家级高新技术企业,致力于绿色生态城市建设全过程的技术服务与咨询

- 参与政府间国际科技创新合作重点专项(中美)"城市节能和低碳解决方案工具"研究课题,从国际经验出发探索符合中国低碳城市建设的政策建议
- 对比研究八款软件工具,九套指标体系以及分析50余项相关政策属性,提出工具开发的逻辑结构和政策推荐的合理框架,撰写课题阶段性研究报告(3万余字)

学生课题, Sweco Denmark, 哥本哈根

2018.7-2018.11

欧洲跨国工程咨询公司,活跃于建筑、能源、基建、电力、环境等领域

- 定量分析多种热生产技术、输热管道、用户侧装置在传统、低温、超低温三种情景下的性能变化,基于 Excel 开发区域供热评估工具
- 从经济、环境、能源、社会经济多方面对系统在不同温度情景下进行比较评估,辅助制定合理的 定价、补贴、税务等经济策略,促进可持续供热系统转型

## 专业技能

能源系统建模,数据分析,可行性研究,生命周期评估,光伏系统设计

爱好: 摄影, 游泳, 羽毛球, 旅行博客 http://www.mafengwo.cn/u/memory.html

程序软件: MS Office, Python, LATEX, HTML, GAMS, SimaPro, PVsyst, Photoshop, Premiere 语言水平: 雅思 7.0, CET 6 级, 普通话二级甲等

# 活动经历

联合创始人, 上海交通大学"绿蕉"可持续校园倡议组织 (推广和践行 SDGs)	2018.3-2019.6
Oikos Develop Prize 2018 社会创业竞赛	2018.5
Chr. Hansen 可持续发展案例竞赛 (SDG 12)	2018.4
会长,上海交通大学国际交流协会(成员60+,校星级社团)	2016.5-2017.6
昆山杜克大学国际环境政策项目 (iMEP) 夏令营	2017.8
上海中医药大学附属龙华医院守望临终关怀志愿者	2015.9-2016.1
上海市启音学校 (聋哑教育机构) 志愿助教	2015.4