# Jinyong (Edward) Sung

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## **Profile**

- ✓ PhD Candidate (UTS Research Excellence Scholarship recipient) at UTS Institute for Sustainable Futures
- ✓ +10 years of work experience in corporate finance and management consulting at Global energy/financial companies and the U.S. Top-tier/Ivy League education; and Bilingual in English and Korean
- ✓ Core competencies<sup>1</sup> : Energy/Financial modelling; Corporate Strategic Planning; Financial/Operational analysis

## **Education**

| <ul> <li>University of Technology Sydney (UTS), Institute for Sustainable Futures</li> <li>Ph.D. in Energy Futures (Field of specialization: Energy Economics and Energy Policy)</li> <li>Supervisory panel: <i>Principal Supervisor</i> Xunpeng (Roc) Shi (Australia-China Relations Institute) (Institute for Sustainable Futures, Energy), and <i>External Supervisor</i> Mengheng Li (Economics D</li> <li>Research field subject result: Econometrics (Grade: High Distinction)</li> </ul> | · •                                  |
|---|--------------------------------------|
| Johns Hopkins University – MBA/MA Dual Degree   |                                      |
| Johns Hopkins School of Advanced International Studies (SAIS)   | Washington, DC., USA                 |
| M.A. in Int'l Economics & Int'l Relations with a focus on Energy, Resources, & Environment  | May 2013                             |
| Johns Hopkins Carey Business SchoolBaltimore, MIMBA with a focus on Finance & Energy and EnvironmentBaltimore, MI   | D / Washington, DC., USA<br>Dec 2012 |
| Brown University, School of Engineering   | Providence, RI, USA                  |
| M.S. in Innovation Management and Entrepreneurship Engineering  | May 2008                             |
| <b>Purdue University,</b> College of Engineering  | West Lafayette, IN, USA              |
| <b>B.S.</b> in Industrial Engineering (Major) & Mathematics (Minor)   | May 2007                             |

# **Fields of interest**

Energy Economics and Energy Policy, Deep/Machine Learning, Applied/Financial Econometrics, Applied Economics

## Research

#### Working papers

- Sung, J., Shi, X., Teske, S., & Li, M. (2023). Short- and Long-term effects of key drivers in China's Natural Gas Market. *Submitted*
- Sung, J., Shi, X., Teske, S., & Li, M. (2024). A hybrid SARIMAX-LSTM model optimised by ANN for near-term forecasting: An application to China's Natural Gas consumption. *Submitted*
- Sung, J., Shi, X., Teske, S., & Li, M. (2024). Chinese Natural Gas Phase-Out Pathways: A Novel Hybrid Prophet-SARIMAX Approach to Achieve Net Zero. *Submitted*

#### Work in progress

• Sung, J. (2024). China's 2060 Carbon Neutrality Pledge: The dynamic effects of changes in China's natural gas consumption on the Australian economy

#### Non-academic work

• Shi, X. & Sung, J. (2023). Australia's natural gas security policy spills over the region. East Asia Forum post

### <u>Awards</u>

- Australian Government Research Training Program Stipend (**UTS Research Excellence Scholarship** for highly ranked, newly-commencing doctoral students) / Fee Offset Scholarship, UTS, 2022-2025
- Vice Chancellor's Conference Fund 2024 of the 41 USAEE/IAEE Conference, UTS, 2024
- Certificate of Appreciation in recognition of high-performing work at SK advanced (SK Group's Chemical arm), 2017
- SAIS Summer Internship Fund, Johns Hopkins School of Advanced International Studies, 2012

<sup>&</sup>lt;sup>1</sup> VETASSESS, an Australian government agency of vocational assessment, acknowledged my professional experience as management consulting skills.

• Research Assistantship, Johns Hopkins Carey Business School, 2010F, 2011S

## **Professional experience**

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|---|---|
| <ul> <li>EMS Trust (specializing in investing in education biz &amp; commercial/residential properties)</li> <li>Investment Director &amp; Co-founder</li> <li>Developed investment opportunities; Developed the Trust's mgmt. system; and Operated the Trust.</li> </ul>   | Sydney, Australia<br>2018-2021                              |
| <ul> <li>Mazars Global Infrastructure Finance Pty Ltd</li> <li>Project Manager, Model Build Team</li> <li>Built and audited financial models for energy, infra., &amp; PPP projects; and Delivered financial model tr</li> </ul>  | Sydney, Australia<br>2017-2018<br>raining courses.          |
| <ul> <li>SK Advanced (Chemical arm of SK Group; 3-party JV: APC(KSA Chem)-PIC(Kuwaiti Chem)-SK Gas)</li> <li>Strategy &amp; Planning Manager, Management Planning Team</li> <li>Devised the JV implementation plan (incl. valuation); and Worked closely with JV board members.</li> </ul>  | Seoul, S. Korea<br>2015-2017                                |
| SK Gas (Energy arm of SK Group, 3rd Korean conglomerate/top 100 in Fortune Global 500)SirStrategy & Planning Manager (Employed by SK Global MBA recruitment), Corporate Strategy team• Performed new biz development/strategy consulting projects: LPG trading, Power plant, Petrochem, &   | ngapore/Seoul, S. Korea<br>2013-2015<br>& Renewables.       |
| <ul> <li>Center for Climate and Energy Solutions (Top-tier U.S. think tank on Global Climate Change)</li> <li>Policy Analyst (MBA/MA Summer Intern), International Policy Research Team</li> <li>Conducted research on market-based policy instruments in the CO<sub>2</sub> emission markets of Brazil, China</li> </ul>   | Arlington, VA, USA<br>2012 (3 months)<br>, Africa, & Korea. |
| <ul> <li>Johns Hopkins Carey Business School</li> <li>Research Assistant to Mitsukuni Nishida</li> <li>Modelled the relationship between economic development and utility infra. growth in emerging countries</li> </ul>  | Baltimore, MD, USA<br>2010-2011<br>ries in Asia.            |
| <ul> <li>Hanwha Investment &amp; Securities</li> <li>Associate, Investment Banking II Team (Employed by Hanwha Global recruitment)</li> <li>Successfully completed 20 capital financing &amp; 3 M&amp;A (incl. backdoor listing) projects.</li> </ul>   | Seoul, S. Korea<br>2008-2010                                |
| <ul> <li>NAVER Corporation (Korean premier IT company operating the nation's top search portal)</li> <li>Summer Intern (Employed by the U.S. Internship Recruitment), Market Strategy Team</li> <li>Assessed competitors' marketing strategies; and Evaluated the social impact of online advertising.</li> </ul>   | Seoul, S. Korea<br>2007 (3 months)                          |
| Professional training and coaching experience   |   |
| Financial modelling trainer, Mazars Global Infrastructure Finance Pty Ltd   |   |
| <ul> <li>Best Practice Project Finance Modelling</li> <li>Excel Diploma</li> </ul>  | 2017-2018<br>2018   |
| New employee trainer, SK Advanced   |   |
| • Understanding of the Propane De-Hydrogenation (Petrochemical) business  | 2015-2017   |
| Presentations   |   |
| The 41USAEE/IAEE Annual Conference in Baton Rouge, LA, USA; The 2 <sup>nd</sup> ISETS Annual Conference in Nanjing, China; The 34 <sup>th</sup> CESA Annual Conference in Adelaide, Australia; Seminars in Beijing Institute of Technology, China and Yonsei University, S. Korea Knowledge Sharing session in UTS ISF; Presentation for PhD Stage 2 assessment (UTS) | 2024  |
| Presentation for PhD Stage 1 assessment (UTS), Knowledge Sharing session in ACRI  | 2023  |
| Knowledge Sharing session in UTS Australia-China Relations Institute (ARCI)   | 2022  |
| Additional information  |   |

## Additional information

Skills: Python - Deep/Machine Learning (Master), MS Excel/VBA, Matlab, MS PowerPoint, GAMS, Power BI, HTML

Visa status: Australian permanent resident

References available upon request