Li Zeng

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Personal Summary

Master's student in Technology and Economics at ETH Zürich with a background in Materials Engineering and a strong academic record (Top 5% and ranked 1st place respectively). Over one year of experience in equity and project financing in the sector of energy and resources, plus extensive research experience in sustainable technology and finance—including battery synthesis and recycling, solar PV, and ESG bonds. Skilled in both quantitative and qualitative research methods. Passionate about integrating sustainable technologies with economics and policy, aiming to pursue a PhD to deepen this integration and contribute to the global net-zero transition.

Education

Swiss Federal Institute of Technology (ETH Zürich) — **Zurich, Switzerland**
M.Sc. in Management, Technology and Economics — *2021.09 – Current*

- GPA 5.6/6.0, Top 5% in cohort.
- **Relevant Courses:** Renewable Energy Technologies, CO_2 Removal Technologies, Resource and Environmental Economics.

The University of British Columbia — **Vancouver, Canada**
B.A.Sc. in Materials Engineering, with Distinction (Minor: Business) — *2018.09 – 2021.05*

- GPA 91/100, Rank 1st out of 63.
- **Relevant Courses:** Metallurgy, Material Process Modeling, Materials Influence on Environments, Materials Economics.

Research Experience

Institute of Science, Technology and Policy, ETH Zürich — **Zurich, Switzerland**
Thesis Student & RA at Energy and Technology Policy Group, Prof. Tobias Schmidt — *2023.10 – Current*

- **M.Sc. Thesis (ongoing):** Life-Cycle Assessment and Techno-Economic Analysis of Li-ion Battery Recycling
  - Identified and conceptualized research gaps and ideas; independently designed the research framework and process; compiled a database of recycling facilities in Europe and developed an LCA-TEA model using Python and Excel.

- **Assisted Projects**: VAT Reduction on food preference in Latvia; Harnessing oil and gas super profits for climate finance
  - Conducted desktop research, data collection (>180,000 datapoints), expert interviews, descriptive and inferential statistics (Difference-in-Differences and Synthetic Control Methods) using R.
  - Contributed to two research papers; acknowledged in one publication, with another paper currently in progress.

Project Student & RA at Climate Finance and Policy Group, Prof. Bjarne Steffen — *2023.08 – Current*

- **Semester Project:** ESG-bonds for the Net-Zero Transition in Southeast Asia
  - Constructed a database of 13,834 bonds; performed statistical analysis and visualization in R; analyzed Vietnam's case study; provided policy implementations and contributed to a World Economic Forum White Paper.

- **Assisted Projects:** Offshore Wind Farm; Alps Mountain and Lake Solar PV; Winter Rooftop PV
  - Collected and processed financial, technical, and geological data from Bloomberg, IEA, etc.; modified and visualized energy models using MATLAB, QGIS, and Python for paper revision.
  - Contributed to an exploratory study and two academic papers; acknowledged in publications (one in revision).

Center of Financial Services Innovation, University of St. Gallen — **St. Gallen, Switzerland**
Research Assistant at Sustainable Finance Lab, Prof. Julian Kölbel — *2023.04-2023.08*

- **Assisted Projects:** Sustainability-Linked Bonds; Corporate Climate Engagement.
  - Collected and verified financial data from multiple sources (cold emails, field experiments, and financial databases); assisted matching methods and t-tests for empirical analysis.
  - Contributed to two academic papers; acknowledged in one publication.

Department of Chemistry, National University of Singapore — **Singapore**
Exchange Research Program at Surface and Interface Lab, Prof. Wei Chen — *2019.05-2019.08*

- **Research Projects:** Li-O_2 Battery Cathode Material Development.
  - Designed and conducted chemical experiments to synthesize, characterize, assemble, and test a Li-O_2 battery using CMK-8 as a cathode, achieving no degradation after 72 cycles—compared to 20 cycles for the baseline material, EC-300J.
  - Authored a report, received an A (highest grade), and won Best Student Poster Presentation award at a conference.

RESEARCH CONTRIBUTION

Publications:

- Yang, H., **Zeng, L.**, Zhang, B.*, et al. (2023). Dislocation-driven growth of WS_2/WSe_2 quantum well superlattices. *Frontiers in Materials*, 10.

Presentations:

- **Oral:** Zeng, L. (2020). *P-MOSFET structure redesign by stress simulation and analysis*. Presented at The International Conference of Undergraduate Research, Monash University, Melbourne, Australia.
- **Poster:** Zeng, L. (2019). *Mesoporous carbon materials improving Li-O_2 batteries cathode performances by its permselective channels*. Presented at Generate 2019 Fall Conference, Hyatt Regency, Vancouver, Canada.

Contributed Publications (name in Acknowledgements as RA):

- Đukan, M., Gut, D., Gumber, A., & Steffen, B. (2024). Harnessing solar power in the Alps: A study on the financial viability of mountain PV systems. *Applied Energy*, 375, 124019.
- Egli, F., Stünzi, A &. Grubb, M., (2024). Harnessing oil and gas super profits for climate finance. *Climate Policy*. (in Press)
- Heeb, F., & Kölbel, J. (2024). The impact of climate engagement: A field experiment, *MIT Sloan Research Paper* No. 7057-24.

TEACHING & SERVICE

Department of Management, Technology and Economics, ETH Zürich
Tutor of Economics for MAS Students (equivalent to MBA program). 2022.09-2023.05

Office of Global Engagement, University of British Columbia
Tutor and Ambassador of "Go Global" Program. 2019.09-2020.05

PROFESSIONAL EXPERIENCE

China International Capital Corporation Ltd Beijing, China
Private Equity Intern at Capital Management Division *2022.04-2022.09*

- Engaged in a full-cycle C-round deal for a SaaS company (pre-investment valuation: 550 million CNY). Sourced and built a database of over 100 un-IPO clean tech companies in China.

Chongqing Industrial Investment Fund Ltd Chongqing, China
Fund of Funds Intern at Portfolio Management Division *2021.06-2021.09*

- Authored 5 investment analysis reports on batteries, EV and other industries covering total deals worth over 171 million CNY.

Western Copper and Gold Corp Vancouver, Canada
Consultant Intern of School-Industry Co-op Program *2021.01-2021.06*

- Conducted a pre-feasibility study for a hydrometallurgy plant (capacity: 45,600 t/year) to evaluate added value options following the heap leaching process of the Casino Copper project.

SCHOLARSHIPS & AWARDS

Scholarships:

International Student Scholarship (18,500 CAD, Highest Honor, UBC) 2019-2021
Trek Excellence Scholarship (8,000 CAD, Top 5% Ranking, UBC) 2019-2021
Frank A. Forward Memorial Scholarship (2,500 CAD, Highest Honor, D-MTRL, UBC) 2019
"Go Global" Research Abroad Scholarship (2,000 CAD, Excellence in Research, UBC) 2019

Awards:

Dean's Honor List (Merit-based award, UBC) 2019-2021
Kaggle Bronze Medal (M5 Forecasting Competition, Top 9% Ranking, Kaggle) 2020
Best Student Poster Presentation (500 CAD, Conference: Generate 2019) 2019

LANGUAGES & SKILLS

Language: Chinese Mandarin (Native), English (Fluent), German (Basic)
Programming: R (ggplot2, aov, lfe, did, Synth, etc.), Python (Scikit-learn, TensorFlow, etc.), VBA, MATLAB, Git
Qualitative Methods: Literature Review, Expert Interview, Survey Design, Cold Emails, Due Diligence, Case Study

Reference Upon Request