

# Gedian Wang

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## WORK EXPERIENCE

### Shemar Power Engineering

Shanghai, China

Executive Assistant to the Chairman

05/2025 – Present

*Shemar brings together materials science and transmission engineering to provide Generation 2.0 power grid solutions globally.*

- **Market Strategy Development for Target Countries**

- Compiling transmission infrastructure datasets across multiple countries. Quantitatively analyzing the data to identify key pain points such as lack of grid accessibility, reliability concerns, funding shortfalls, and urgent requirements, with the goal of selecting high-potential target projects and formulating regional entry strategies.
- Investigating each target country's grid investment schemes, regulatory frameworks, decarbonization targets, energy-demand growth, and other macroeconomic conditions to assess market attractiveness and guide business development strategies.

- **International Market Research**

- Conducting research on the transmission industries of multiple countries, including market size, network topology, reliability performance, and investment drivers. Presenting comprehensive data-driven country coverage reports for senior management and international partners.
- Organizing cross-departmental coordination, integrating engineering, marketing, and financial perspectives to ensure analytical accuracy and strategic relevance in all deliverables.

- **Executive Support to the Chairman**

- Coordinating cross-border meetings, investor engagements, and client visits. Preparing briefings, speeches, and bilingual materials for strategic presentations and international conferences.
- Managing chairman's calendar, high-level communications, and inter-department coordination. Ensuring alignment between daily operations and corporate priorities.

### Aurora Energy Research ("AER")

Oxford, United Kingdom

Analyst – Pan-European Research

05/2023 – 11/2024

*AER is a leading global provider of data-driven insights and analytics for strategic and investment decisions in the energy sector.*

- **Research Project** (European Battery Market Attractiveness Report (2024))

- Conducted quantitative analysis on the prospects for developing grid-scale batteries in 14 European countries, comparing electricity market characteristics such as revenue structures, market sizes, and regulatory environments.
- The report also provided insights and datasets on projected IRRs for developing batteries in each specific year, potential risks, and profitability improvement measures, such as repowering.

- **Research Project** (Renewable Asset Hybridisation Report)

- Investigated regulatory policies for renewable asset hybridisation in nine countries selected by a client.
- Conducted research based on four key metrics: regulatory framework, subsidies and incentives, market access and revenue potential, and grid integration conditions. Authored a 283-page research report and addressed the client's follow-up questions.

- **Market Modelling & Forecasting** (Imbalance Costs for 2024 - 2060)

- Developed a Python algorithm to predict renewable generation forecasting errors. Incorporated forecasted renewable generation and aFRR prices to estimate electricity imbalance costs for a specific country.
- Managed Aurora's forecast of imbalance cost outputs for 22 European countries, updating them biannually.

- **Technical Assumptions** (Battery CAPEX, OPEX, degradation curves)

- Monitored market prices for materials and components of grid-scale batteries. Managed Aurora's assumptions for battery CAPEX and OPEX, updating them twice per year. Provided consistent responses to external client inquiries.
- Standardised battery degradation curves across multiple business scenarios, ensuring uniformity for all European offices.

### Connective Capital Management ("CCM")

Palo Alto, CA, USA

Research Analyst

07/2022 – 12/2022

*CCM is a Silicon Valley-based Hedge Fund company. It mainly focuses on technology companies in global secondary markets.*

- **Investment Research** (Nuclear Power Industry)

- Conducted fundamental research on the nuclear power industry to identify potential investment opportunities (RTO, PIPE) in the Small Modular Reactor (SMR) subsector. Mapped SMR companies in North America and Europe. Conducted research meetings with 9 companies' management teams and bankers. Assisted in the due diligence process with the tech advisor.
- Refined the investment thesis in clean energy, focusing on uranium deposits & mines, waste disposal, historical uranium shortage, SMR technology, and the impact of new policies and events in 2022.

- **Conducted Trade Strategies** ("Hard-to-Borrow", "FADE", "SPAC", "Earnings", Position Cleanup)

- Developed a quantitative trading strategy, aiming to generate intraday alpha from stocks with ultra-high hard-to-borrow rates. Conducted Python-based back-testing, achieving 2.71% average return per intraday trade (median PnL 3.4% & hit rate 61%).
- Conducted research on equities with abnormal fluctuations and provided daily trade suggestions based on several existing strategies. Recommendations were based on news analysis and multiple quantitative indicators.
- Monitored current positions and provided suggestions for adjustments during post-earnings or post-fading periods.

- **Database Management** (Cleaned MySQL database, Deals Screening, Built Google Sheet Add-ins)

- Used Bloomberg Terminal to search for potential companies based on the blurry information provided by the bankers.
- Maintained, updated, and cleaned CCM's MySQL database using DataGrip. Kept consistency among all records in the tables.
- Made a Google Sheet Add-in with the developer. The add-in can let a user write a SQL query in one cell directly.

EDUCATION

<b>University of California, Los Angeles (UCLA)</b> Master of Quantitative Economics (STEM) – Financial Economics; <i>GPA: 3.7</i> <ul style="list-style-type: none"><li>Selected courses: Data Science for Financial Engineering (4.0/4.0), Machine Learning I (4.0/4.0)</li></ul>	Los Angeles, CA, USA 09/2020 – 06/2022
<b>Oklahoma State University</b> B.S. in Agricultural Economics; <i>GPA: 4.0</i> <ul style="list-style-type: none"><li>Honor: President’s Honor Roll</li></ul>	Stillwater, OK, USA 08/2018 – 12/2019
<b>China Agricultural University</b> B.M. in Agri-Forest Economic Management; <i>GPA: 3.5</i> <ul style="list-style-type: none"><li>Honor: Beijing Excellent Graduate (top 2%), 1st level scholarship in social work (top 1)</li></ul>	Beijing, China 08/2016 – 06/2018

RESEARCH EXPERIENCE

<b>13<sup>th</sup> International Conference on Restructuring of the Global Economy (ROGE) 2024</b> <Reviewing Egypt's Food Subsidy Scheme: Addressing New Challenges for Food Security> <ul style="list-style-type: none"><li>Authored and published the following conference paper as the first author.<ul style="list-style-type: none"><li>Wang, G. (2024). Reviewing Egypt's food subsidy scheme: Addressing new challenges for food security. <i>The Business and Management Review</i>, 15(1), 173-182. Conference proceedings of the Centre for Business &amp; Economic Research, 13th International Conference on Restructuring of the Global Economy (ROGE-2024), Oxford, United Kingdom.</li></ul></li><li>Reviewed the literature on Egypt's food subsidies. Assessed the historical progression and challenges of various food subsidy schemes since 1970. Discussed their socio-economic impacts and the financial burdens they impose on the government.</li><li>Examined the impacts of external factors such as the establishment of the Grand Ethiopian Renaissance Dam, the Russia-Ukraine war, and reduced revenues from the Suez Canal on the efficiency and sustainability of Egypt's food subsidies.</li><li>Proposed innovative measures, including international collaboration, technological advancements, and a supply chain supervision system, to enhance the efficiency of food subsidies and mitigate the financial burdens on the Egyptian government.</li></ul>	Oxford, United Kingdom 08/2024
<b>Master’s Graduate Capstone Project</b> <Carry Trade with SGD/USD: Comparing Two Exchange Rate Forecasting Models> <ul style="list-style-type: none"><li>Developed a traditional Real Interest Differential (RID) model and a Long Short-Term Memory (LSTM)-Based Time Series model to predict SGD/USD exchange rates using Python. Evaluated the performance of these two models using metrics including Mean Squared Error (MSE), Mean Absolute Error (MAE), R-squared, Theil’s U, and Directional Accuracy (DA).</li><li>The results proved that an LSTM network with given inputs and fine-tuned parameters can demonstrate significantly better performance in predicting the movement direction of exchange rates, with 57.14% directional accuracy. In contrast, the RID model achieved only 50% directional accuracy, which is no better than a random walk process.</li></ul>	Los Angeles, CA, USA 03/2022 – 05/2022
<b>Oklahoma Association of Electric Cooperatives (OAEC)</b> <i>Research Assistant &lt;Economic Impact of Oklahoma Agricultural Cooperatives&gt;</i>	Stillwater, OK, USA 02/2019 – 05/2019

INTERNSHIPS & ACTIVITIES (Selected)

<i>Trustee</i>   <b>International College Beijing - British Alumni Association</b> ( <i>China Agricultural University</i> )	10/2023 – Present
<i>Research Assistant</i>   <b>OxValue.AI</b> ( <i>AI Startup</i> )	02/2025 – 05/2025
<i>Intern</i>   <b>MiraclePlus - former Y Combinator China</b> ( <i>Venture Capital</i> )	04/2021 – 08/2021
<i>Intern</i>   <b>ByteDance – TikTok</b> ( <i>International Business Analysis</i> )	07/2020 – 09/2020
<i>Intern</i>   <b>JD.COM   Department of Strategic Investment</b> ( <i>Corporate Venture Capital</i> )	03/2020 – 05/2020
<i>Intern</i>   <b>ZGC River M&amp;A Research Institute</b> ( <i>Goodwill Impairment Analysis</i> )	07/2019 – 08/2019

SKILLS & QUALIFICATIONS & INTERESTS

Languages

- English (fluent), Mandarin (native), Arabic (currently learning)

Technical Skills

- Programming** | SQL, R, Python (Machine Learning, Econometrics Analysis), Excel – VBA
- Microsoft Tools** | PowerBI, PowerPoint, Excel, Word
- Adobe Tools** | Photoshop, Illustrator, After Effects
- Financial Analysis** | Bloomberg Terminal, Capital IQ, CAPM, DCF

Credentials

- International Society of Sustainability Professionals – Sustainability Excellence Associate (ESG)
- Chinese Sports Agent (Lv. 3)

Interests

- Self-driving (Had been a commercial driver with over 50,000 km of commercial operation experience in California, USA)
- Travel (15 countries)
- Urheen (an instrument, had played in the Golden Hall Vienna)
- Lure Fishing