



Matt Ji



Programmer, Engineer, Consultant

Gutach im Breisgau, Baden-Wuerttemberg, DE

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Skills:

bash Python HTML CSS NixOS Go HTMX Docker JavaScript Linux
 PDF Typst

Experience:

Bountystash *Founder*

2020-06-01 - 2025-08-19

- Build an algorithm for options trading and hedging on weather derivatives
- Advised clients and acted as in-house Risk Manager for a top German energy trader
- Build an immutable web templating language to make it invulnerable to scripting attacks
- built risk-adjusted PPA trading models for energy companies
- risk managed gas storage and gas swing trading models as a risk manager for EWE Trading
- built apps for clients with 300M+ valuation land portfolios
- architected a portfolio strategy for covered-call risk hedging strategy for clients
- developed fibonacci binary tree algorithm for computational scientists
- developed an LLM-based knowledge base software solution
- audited bug bounty programs
- learned and self-taught NixOS and Kubernetes

03 Energy *Asset Manager*

2016-08-01 - 2020-06-01

- built financial models and managed 10 MW solar PV power plants
- head of asset management of a 100M+ portfolio
- scoped and due diligenced O&M projects as backup to project managers
- document and managed software and IT admin for company and subsidiaries
- interfaced with clients, banks and deal brokers to handle a dozen 4-5 million dollar projects
- analyzed corporate liability risks and developed an internal risk management framework
- designed a mobile app for enterprise employees to scout new project opportunities
- managed an international team and built the incentive structure to a real-time financial model
- scoped and due diligenced O&M projects as backup to project managers
- Build an algorithm for options trading and hedging on weather derivatives

Smart Energy 360 *Director of Sustainability*

2015-08-01 - 2016-08-01

- managed a pipeline of 100M+ projects
- customer service and support for clients
- devised sustainability sales and marketing strategies
- advised clients on cybersecurity software and risk management

Fraunhofer ISE *Hi-Wi*

2012-03-01 - 2012-09-01

- conducted research on heliostat imperfections using interferometry
- C++ for application software for interfacing with equipment
- Python for analysis and 3D geometry
- Mathematica for geometry matrices verification

Halliburton *Associate Technical Professional*

2010-06-01 - 2011-09-01

- implemented new excel spreadsheets for the engineering department
- managed two frack crews 3M+/week
- worked 12 hours a day shifts in the field
- troubleshooted chemicals and equipment on site
- led safety training for crew

members • worked on experimental projects using novel technologies developed by engineering

Projects:

Master's Thesis Artificial Neural Networks Fractal Geometry Vector Analysis

• Developed a novel method for time-cross-correlating wind velocity data that yields a +70% accuracy • Trained neural network models for long-term weather data to optimize grid economics of intermittent ☼ solar and wind resources

Postgraduate Renewable Energy Hydrogen Cells Solar

• Analyzed hydrogen production and storage projects using RETScreen • Post-graduate research in renewable energy • Solar, Wind, Geothermal, and Bioenergy modules completed under the

Education:

University of Freiburg *Master of Science* 2011-11-01 - 2014-02-01

• Intermittent Renewable Energy and Weather Patterns Analyzed through Artificial Neural Networks

Colorado School of Mines *Bachelor of Science* 2006-08-01 - 2010-05-15

• McBride Honors Program in Public Policy • Economics

Language:

• English: Native speaker • German: Fluent