

Kefei Mo

Data Engineer

Pullman, Washington

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[LinkedIn](#) | [GitHub](#) | [Medium](#)

SUMMARY

I have 4-year engineering experience in the energy industry to develop and deploy data driven products. I am experienced with the key stages in data products development cycle, including data access, data processing and the Data analysis. I worked closely with stakeholders (Software engineer, BI analysts, and Database administrators) to unleash the power of data. I enjoy utilizing technology and making products to help the customers and solve their problems. I am ready to face challenges and make my contribution in products development.

SKILLS

Program Language: Python, C#, C++

Data Access: Web scrapping, API request

Natural Language Processing (NLP): Text processing (cleaning, regex, stemming, tokenization, etc.), Classification, Auto-complete, POS tagging, Auto-correction

Database: SQL, Relational database (RDBMS), Hadoop eco-system, Data lake, Data warehouse

Data Visualization (Data Viz): Matplotlib, Seaborn, Plotly

Business Intelligence (BI): Tableau, Dashboard, OLAP, Data cube

Others: Linux, Git, Bash

EXPERIENCE

E8 Angels | Seattle, Washington

Technical Fellow / Investment Analyst

08 2019 – CURRENT

Provided insights and investment recommendations on clean-tech startups. Contributed in building investment portfolios including Xeal, Earthly Labs, Steelhead, etc. with \$115,000 fund from Decarbon8. ([news](#))

- Specialized in technologies of Renewable Energy, EV Charging, Battery/Storage, Energy Efficiency, Demand Response, Microgrids.
- Analyzed on the problems, use case, solution, market, customer, business model, financing, etc.
- Evaluated and screened 30+ applications submitted to E8. Contributed in the due diligence process before making final investment decisions.

Washington State University | Pullman, Washington

Research Assistant

05 2016 – 12 2018

Researched on and advocated innovative technologies related to Distributed Power System.

- Specialized in Distributed Power System Operation and Control, Automation, Stability, Microgrids.
- Proposed algorithms to improve electric power system resilience: to restore service rapidly from power outage.
- Tested the algorithms by demonstrating a restoration procedure within Washington State University microgrid.
- Published papers about diesel generator parameter identifications using transient data.

HuaYuan (NARI Group Corporation) | Beijing, China

Project Manager

01 2014 – 03 2015

Lead 3 SCADA projects to improve distributed power system security and automation for the power utility customers. The value of the total contract was \$320,000.

- Projects scope including Intelligent Electronic Device (IED) commission, Human-Machine Interface (HMI) deployment, Database development and deployment Renewable Energy integration, Communication Network construction.
- Completed all the projects as scheduled.
- Achieved 100% customer satisfaction rate.

Automation Engineer

03 2013 – 12 2013

Contributed in 3 SCADA projects in Shandong, Jiangsu, Xinjiang (networks cover roughly 20 million end-users). Projects scope including Intelligent Electronic Device (IED) commission, Database development and deployment, and Communication Network construction.

Software Engineer

08 2012 – 02 2013

Contributed in the software development and IT operations (DevOps). Applied Predictive models for the short-term load forecast modules in the SCADA master HMI system using moving average, linear regression, neural networks models.

EDUCATION

Thinkful

09 2020

Data Science

Washington State University

Master of Science in Engineering (Thesis: [Microgrid For Fast Service Restoration to Critical Load](#))

12 2018

China Agricultural University

Master of Science in Engineering

06 2012

China Agricultural University

Bachelor of Engineering

06 2010

PROJECTS

Web scrapping mini project: scrapping news from space.com and parse html to extract the content.

- Parse html news and extract the content, e.g., heard, author, date published, synopsis, body, etc.
- **Package used:** (python) request, beautifulsoup, re.
- **Please contact me** or refer to this [notebook](#) for more details.

Deep learning on Mobile User Demographics Prediction: a project to help understand customer behavior and improve customer engagement.

- Built models to predict users' demographic characteristics based on their app usage, geo-info, and mobile device properties. Improved accuracy for 10% when using deep learning.
- **Technologies used:** Natural language processing (NLP), Sequential data analysis and modeling, Feature engineering, Text preprocessing, tokenization, Word embeddings, xgBoost, lightGBM, CNN, RNN, LSTM.
- **Please contact me** or refer to this [notebook](#) for more details.

Facial Motion Capture and Tracking: a project helps to understand human facial expression and with application to improve chatbots engagement capability.

- Built a real-time facial motion capture (MOCAP) pipeline. Improved control performance and achieved realistic animation.
- **Technologies used:** RGBD sensor, Facial landmarks recognition and tracking, 3D modeling and control.
- **Watch this [video](#)** to see the project demo.

CERTIFICATIONS

Data Visualization with Tableau ([credential](#))

09 2020

Modern Big Data Analysis with SQL ([credential](#))

09 2020

Database Management Essentials ([credential](#))

10 2020

Modernizing Data Lakes and Data Warehouses with GCP ([credential](#))

10 2020