

John Feng

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LinkedIn: <https://www.linkedin.com/in/john-feng-5735321b8/>

Skills: Large Language Models (LLMs), Prompt Engineering, AI Engineering, NLP, Time Series Analysis, Deep Learning, Statistical Modeling, Regression, Classification, Data Visualization, Web Scraping

Visualization: Tableau, Powerpoint, Python: Plotly, Matplotlib, Seaborn, Streamlit

Other tools: Git, AWS cloud, Docker, SQL

EDUCATION

Ph.D. in Physics, University of Toronto	2015 - 2022
<ul style="list-style-type: none">Van Kronecker Teaching Assistant Award (2020-2021)3-minute thesis University of Toronto finalist (2017, 2018)	
Masters of Science, Physics, University of Toronto	2014 - 2015
BSc. Honours, Physics and Human Biology, University of Toronto	2008 - 2013

EXPERIENCE

AI Engineer – Brave Career (Freelance)	Jan 2025 – Present
<ul style="list-style-type: none">Build AI agent for conducting mock interviews to help clients prepare for job applicationsCreate automatic data pipeline for Supabase PostgreSQL databaseAI agent can conduct interview, evaluate interview performance, and help clients improve interview performanceUse LiveKit for realtime audio and video interaction with AI agent	
Applied Scientist in Detector Physics team – Redlen Technologies	Oct 2023 – Present
<ul style="list-style-type: none">Develop and execute test methods to characterize semiconductor devices, analyzing results to improve device performanceAnalyze data from Factory Accepted Testing (FAT) to derive insights and actionable improvements in our productCode Python scripts for automated data acquisition and analysisWrite reports and present project proposals for technical and business audienceCreate data analytics dashboards with Python Streamlit and JMP. Implement cleaning + extraction data pipelines of raw data	
AI/LLM Developer (contractor) - Aggregate Intellect	Jun 2023 – Oct 2023
<ul style="list-style-type: none">College admissions chatbot helper: Scrape college websites for admissions details and program specific information using Python Scrapy libraryCreate conversational chat interface that queries from scraped information and SQL database, to help international students find ideal programs and specific college application requirements, built with latest LLM integration packages in Langchain. Details reported here.ML-OPS: deploy and monitor applications, constantly making improvements based on client's feedback.Contribute to community open-source project Sherpa, AI agent embedded in Slack for reasoning and answering queries	
Machine Learning Engineer - Branchy Solution (Contract)	Dec 2022 – May 2023
<ul style="list-style-type: none">Collaborated with a international client throughout requirement gathering, project scope definition, solution architecture, and implementation of a comprehensive pipeline in Python for efficient table extraction from imagesThoroughly investigated and compared multiple approaches, customized Microsoft's open-source DETR (transformer-based) model on Hugging Face to automatically extract tabular information using Google Vision API's OCR functionalityDeveloped a user-friendly application enabling clients to upload files in bulk, resulting in a monthly time-saving of 100+ hours	
Research Assistant - University of Toronto	Sept 2015 – Dec 2022
<ul style="list-style-type: none">Prepared detailed data visualizations with Python for publication in a scientific journalPresented my research to both public and technical audience on various occasions, e.g. global scientific conferences, local university committee of professors, public speaking competitionsLed a large-scale project involving multiple collaborators across the world (details written in my thesis)10+ years of Python experience, taught Python in university courses	
Head of Data Analytics - HD-RGB	June 2016 – June 2022
<ul style="list-style-type: none">Co-founded a start-up for modifying older game consoles to output high-definition graphicsCreated an ETL pipeline for sales and supply cost dataAnalyze data for market insights and to drive revenue growth and profit	