

XINDONG XU

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Education

Shanghai Jiao Tong University

Sep. 2024 – Feb 2026

Master of Engineering (Deep Learning and Mechanical Engineering)

Shanghai, China

- Developed a dual-modality deep learning framework for automated blood layer segmentation with cross-illumination attention, deployed on a custom robotic liquid handling and imaging platform to enhance analytical accuracy.

Mines Paris - PSL

Sep. 2021 – Feb 2026

Diplôme d'Ingénieur (Master of Science)

Paris, France

- Relevant courses: Optimization, Operational Research, Advanced Stochastic Process, Deep Learning, Reinforcement Learning.
- Recipient of the France Excellence Eiffel Scholarship, awarded by Campus France.

Shanghai Jiao Tong University

Sep. 2018 – Jun 2022

Bachelor of Engineering (Mechanical Engineering)

Shanghai, China

- Relevant courses: Dynamical System, Programming Methodology, Data Structures and Algorithms.
- Shanghai Outstanding Graduate Award, conferred by the Shanghai Municipal Education Commission.

Experience

AI Content Automation Startup (Co-Founder)

Dec 2024 – Present

Full-Stack Developer & Product Designer

Shanghai, China

- Founded and developed a full-stack AI content automation system producing 10K+ high-quality articles across 50+ managed accounts with measurable revenue.
- Engineered integrated pipelines for data scraping, trend analysis, and RAG-enhanced content generation using multi-provider APIs (OpenRouter, Google Vertex, Volcengine), complemented by automated image creation and RPA-driven publishing workflows.
- Architected a cloud-native data infrastructure with PostgreSQL and vector databases to consolidate content, imagery, and engagement analytics for end-to-end performance tracking.

Veolia Asia - Southa Holdings Limited

Jan 2024 – Jun 2024

Data Science Intern

Hong Kong SAR

- Enhanced and deployed ML-based predictive and optimization models for quasi real-time monitoring of chiller plant performance within the West Kowloon Cultural District cooling network, projected to reduce energy consumption by 25%.
- Developed analytical and visualization tools to support data-driven decision-making and operational optimization.

b:bot by GreenBig

May 2023 – Nov 2023

Computer Vision & Embedded Systems Intern

Paris, France

- Developed and deployed customized YOLOv8-based computer vision models on Azure ML Studio and Nvidia Jetson Nano for real-time machine monitoring and fraud detection, reducing compute demand while sustaining 30 fps video processing and preventing ~5 fraud cases daily.

Projects

Bank Intelligent Assistant with MCP Agent Architecture | LLMs, PostgreSQL, pgvector, RAG

Mar 2025 – Jul 2025

- Designed and implemented an MCP agent with multi-iteration reasoning and working memory, integrated with a PostgreSQL pgvector retrieval system for sub-100ms semantic search and 95%+ intent recognition accuracy in banking Q&A services.

Crypto Smart-Money & News Trading Automation | web3.py, Discord.py, Telegram API

Mar 2024 – Present

- Built a real-time crypto news intelligence system that scrapes Twitter updates, uses an LLM to assess event significance, and pushes curated alerts to Discord and Telegram, including automated phone call notifications for high-impact events.
- Developed an on-chain smart-money tracker to monitor profitable wallet transactions across Ethereum, Solana and BNB Smart Chain, triggering instant Telegram alerts for trade replication and analysis.

Underwater Robotic Arm with Deep Reinforcement Learning | Python, Q-Learning

Nov 2022 – Feb 2023

- Designed and trained a Deep Q-Learning model for autonomous control of an underwater robotic arm at Mines Sophia-Antipolis, enabling intrinsically motivated exploratory behavior.

Interactive VR Game for Château de Versailles | Unity, C#, 3D Modeling

Sep 2022 – Nov 2022

- Developed a VR escape game in Unity featuring interactive gameplay and 3D modeling of the Château de Versailles.

L'Oréal User Feedback Sentiment Analysis | Python, NLP, LSTM

May 2022 – Jul 2022

- Built an LSTM-based NLP model to extract sentiment themes from unstructured feedback for product insight generation.

Electron Trace Repair via GANs | TensorFlow, Keras, GANs

2021

- Developed a TensorFlow-based GAN model for electron trace restoration in the PandaX non-neutrino double-beta decay experiment.

Technical Skills and Languages

Languages: Python, C/C++, C#, Solidity, MATLAB, SQL, JavaScript, HTML/CSS, Latex

ML/AI Frameworks: PyTorch, TensorFlow, Keras, OpenAI API, asyncio, LangChain, RAG, pgvector, scikit-learn

Data & Cloud: pandas, NumPy, Flask, FastAPI, PostgreSQL, Vector Databases, Git, Docker, Azure Studio, GCP

Languages: Mandarin & Shanghaiese (Native), English (C2, 105/120 TOEFL), French (B2), Russian & Cantonese (Beginner)