

ERWIN DENG

French citizen | Seeking opportunities in Europe starting September 2026
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EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Cambridge, MA

Candidate for Master of Business Analytics, Operations Research Center, August 2026, GPA: 5.0/5.0

2025 - Present

- Selected Coursework: Machine Learning, Optimization, Advanced Analytics Edge, Hands-on Deep Learning, GenAI Lab, Power and Negotiation, Communication through Data

CENTRALESUPELEC, UNIVERSITE PARIS-SACLAY

Paris, France

Bachelor and Master Degree of Engineering, GPA: 4.0/4.0

2022 - 2024

- Coursework: Advanced Statistics, Partial Differential Equations, Software Engineering, Economics, Climate Sciences
- Teaching Assistant: Led algorithmics tutorials (graphs, dynamic programming, etc) for 30 first-year undergraduate students
- Leadership: Awarded the CentraleSupélec scholarship for involvement in Student Life and Associations
- Community involvement: Raised \$15,000 and organized a 5-week mission in Nepal supporting children's education

TECHNICAL SKILLS

- Python (PyTorch, Keras, Hugging Face, MLflow, Pandas, Scikit-learn, NumPy, Matplotlib, Streamlit), R, SQL, Julia, Java, C++, Git, FastAPI, HTML/CSS/PHP

EXPERIENCE

MIT SLOAN / FORD MOTOR COMPANY

Cambridge, MA

Data Scientist Intern, MIT Capstone Project

2026 - Present

- Developing AI models for early defect detection in car assembly lines using images (Python)

MIT SLOAN / BMW GROUP

Cambridge, MA

Generative AI Lab Team Member

Spring 2026

- Built a closed-loop LLM evaluation and prompt optimization pipeline for repair-order document extraction
- Developed deterministic and LLM-as-judge evaluation framework in Python to assess structured JSON extraction quality
- Improved extraction performance by 50% over five iterations using LLM reflection and Pareto-based prompt evolution

MIT OPERATIONS RESEARCH CENTER

Cambridge, MA

Graduate Research Assistant for Professor Jacquillat

2025 - 2026

- Developed a double ML model to quantify crew effects on wildfires and guide resource deployment decisions (Python)
- Expanded a wildfire crew dataset by integrating satellite embeddings and weather data

MIT SLOAN / SUFFOLK CONSTRUCTION

Cambridge, MA

Analytics Lab Team Member

Fall 2025

- Developed ML models to predict delays on 200+ construction projects, identifying future losses of \$10M+ (Python, SQL)

RICHEMONT

Buttes, Switzerland

World's second-largest luxury group, owning brands such as Cartier, Montblanc, Piaget, and Van Cleef & Arpels

Data Scientist Intern, Research & Innovation

Spring 2025

- Analyzed manually labeled datasets for watch components, identifying issues such as inconsistent labeling
- Developed universal defect detection model that works across any watch piece, enabling cost-free assessment (Python)
- Presented findings to multiple brands and delivered a production-ready solution (Python)

SOCIETE GENERALE

Paris, France

Data Scientist Intern, Investment Banking

Fall 2024

- Fine-tuned AI models on domain-specific data for document structure analysis, improving accuracy for investment banking
- Developed table parsing and reading order identification models to enhance document understanding (Python)

ADDITIONAL INFORMATION

- Algorithmics competitions: Bronze Medal, European Junior Olympiad in Informatics (2017); 1st Prize out of 220,000 in the Algoréa French Computer Science Competition (2019)
- Personal Project: 2nd runner-up out of 11,000 in EY Open Science Data Challenge 2024; fine-tuned computer vision model for storm damage assessment (Python); presented at IEEE IGARSS 2024
- Languages: French (native), English (fluent), Chinese (conversational)
- Interests: Fencing (organized national student competition in France), Piano, Running