TIAN CHENG "RICCARDO", XIA

tcxia@ik.me notxia.github.io github.com/NotXia linkedin.com/in/tian-cheng-xia

WORK EXPERIENCE

Research Intern · National Institute of Informatics, Tokyo, Japan — July 2025 – Jan 2026

Worked on research projects carried out by the laboratory of Prof. Akiko Aizawa:

- Designed and implemented a controlled multi-agent LLM + RAG pipeline using OpenAI and open-source models for automated scientific paper generation, improving citation accuracy and factual grounding, leading to the acceptance of 2 papers at the `Agents4Science` conference held by Stanford University.
- Co-designed and annotated a multimodal (image, text, and tables) dataset for scientific claim verification, which has been released for the `SciClaimEval` shared task.
- Conducted experiments to assess the effects of hedges and boosters in scientific writing with the goal of evaluating the adversarial effects of certain linguistic patterns on LLMs.

Research Intern · SmartData Research Group, Bologna, Italy — Apr 2023 – Sept 2023

Worked on research projects carried out by the laboratory of Prof. Danilo Montesi:

- Surveyed LLM applications in biomedical NLP, which resulted in an internal technical report that guided the research direction of the group.
- Designed a biomedical summarization pipeline by fine-tuning transformer models on PubMed with a focus on reliability and accuracy, which achieved a +5% improvement in ROUGE and BERTScore on the state-of-the-art and led to the publication of a journal paper.

IT/IS Office Intern · Toyota Material Handling Manufacturing, Bologna, Italy — Dec 2019, July 2019, Feb 2019

- Automated SQL reporting pipelines and assembly-line data tasks using Bash, PowerShell, and Python scripts.
- Audited network infrastructure across the production plant and documented rack connectivity.

EDUCATION

M.Sc. in Artificial Intelligence · University of Bologna, Italy — 2023 – 2026

Thesis title: A Self-Supervised Attribution Method for Explaining Neural Networks
Graduation grade: 110/110 *cum laude* · GPA: 29.6/30 (top 5%)

B.Sc. in Computer Science · University of Bologna, Italy — 2020 – 2023

Thesis title: Subtopic-Oriented Biomedical Summarization using Pretrained Language Models
Graduation grade: 110/110 *cum laude* · GPA: 29.52/30 (top 5%)

SKILLS

Artificial Intelligence	PyTorch · TensorFlow · HuggingFace · LangChain · LangGraph · Scikit-learn LLM fine-tuning · Multi-agent systems · RAG · Multimodal models Explainable AI · Symbolic AI · Constraint programming
Infrastructure	AWS · Google Cloud · Docker · Ansible · CI/CD
Web Development	NodeJS · FastAPI · Flask · Vue · Nuxt · React · AstroJS · SQL · MongoDB
Programming Languages	Python · C · C++ · Java · Kotlin · Javascript

LANGUAGES

Italian	native speaker
English	CEFR C1 (IELTS 7.5)
Chinese	conversational

ACHIEVEMENTS

1st Place at LauzHack 2024, BMS Challenge · EPFL, Lausanne, Switzerland — `Project repository`

Developed an explainable time-series forecasting model using Gaussian Processes and Shapley values to predict pharmaceutical demand, ranking 1st out of 12 teams in the Bristol Myers Squibb hackathon challenge.

1st Place at Tablut AI Agent Challenge · University of Bologna, Italy `Project repository`
Designed and developed an AI player for the asymmetric board game Tablut using adversarial search and heuristic evaluation. The player ranked 1st out of 10 agents.

PUBLICATIONS

Xanh Ho, Yun-Ang Wu, Sunisth Kumar, **Tian Cheng Xia**, Florian Boudin, Andre Greiner-Petter, Akiko Aizawa. (2026).
"SciClaimEval: Cross-modal Claim Verification in Scientific Papers".
Language Resources and Evaluation Conference (LREC). arXiv: 2602.07621.

Tian Cheng Xia, Flavio Bertini, Danilo Montesi. (2025).
"Large Language Models Evaluation for PubMed Extractive Summarisation".
ACM Transactions on Computing for Healthcare. DOI: 10.1145/3766905.

Paolo Ciancarini, Raffaele Giancarlo, Gennaro Grimaudo, Marcello Missiroli, **Tian Cheng Xia**. (2025).
"The Design and Realization of a Self-Hosted and Open-Source Agile Internal Development Platform".
IEEE Access. DOI: 10.1109/ACCESS.2025.3564141.