# Chenxiang ZHANG

zhangta9l@gmail.com | orientino.github.io

#### **EDUCATION**

#### Ph.D. in Machine Learning

Oct 2023 - Present

University of Luxembourg

Esch-sur-Alzette, Luxembourg

- Advisor: Jun Pang, Sjouke Mauw
- Research topics: robustness, privacy, and distribution shifts
- Teaching activities: preparation and grading for exercises and exams

## M.Sc. in Computer Science and Artificial Intelligence

Sep 2020 - May 2023

University of Pisa

Pisa, Italy

- Grade: 110/110 cum laude (highest grade)
- Thesis: "Training, Architecture, and Prior for Deterministic Uncertainty Methods"
- Selected courses: machine learning, pattern recognition, natural language processing, distributed systems, information retrieval, algorithm engineering

# B.Sc. in Computer Science

Sep 2017 - Jun 2020

University of Pisa

Pisa, Italy

- Grade: 91/110
- Thesis: "Technical Smart Compose"
- Selected courses: calculus, linear algebra, discrete math, probability theory, algorithms, and data structure, advanced programming, operating systems

### High School Diploma

Sep 2012 - Jun 2017

Istituto Tecnico Industriale Statale E. Fermi

Lucca, Italy

# EXPERIENCE

#### Software Engineer Intern

Oct 2022 - Apr 2023

Amazon Music Machine Learning

Berlin, Germany

- Developed a tool using ML features to improve the ads targeting of customers
- Measured the success impact by running an A/B test on millions of users

Research Visitor Feb 2022 - Aug 2023

Data Analytics and Machine Learning Group, Technical University of Munich

Munich, Germany

- Studied the literature of uncertainty estimation and distribution shift generalization
- Provided practical guidelines on how to train the family of deterministic uncertainty methods
- Published a paper at ICLR 2023 Workshop on Trustworthy ML

Research Assistant

Jan 2021 - Dec 2021

Knowledge Discovery and Data Mining Group, University of Pisa

Pisa, Italy

- Developed an ML pipeline for Ischemic Heart Disease using real-world clinical data
- Provided ML interpretable results using clustering and feature importance
- Submitted a paper at International Journal of Cardiology

### **PUBLICATIONS**

Charpentier, B., **Zhang, C.**, & Günnemann, S. (2023). Training, Architecture, and Prior for Deterministic Uncertainty Methods. *ICLR 2023 Workshop on Pitfalls of limited data and computation for Trustworthy ML*.

Pingitore, A., **Zhang, C.**, Vassalle, C., Ferragina, P., Landi, P., Mastorci, F., Sicaria, R., Tommasi, A., Zavattari, C., Prencipe, G., & Sîrbu, A. (2024). Machine learning to identify a composite indicator to predict cardiac death in ischemic heart disease. *International Journal of Cardiology*, 131981.

## Honors & Awards

Tuscany regional council for study scholarship (tuition, housing, €8.000 award)	2017 - 2022
Innovation in rehabilitation enhancement and telemonitoring (€9.600 award)	2021
Erasmus program and youth support scholarship (€5.400 award)	2021
Erasmus program and youth support scholarship (€4.500 award)	2019
Participant for the regional Olympiad in Informatics	2015
Participant for the national competition in Math "Giochi di Archimede"	2013

## PROJECTS

# LoopAI Competition | •

2021

- Developed a data and ML pipeline to predict facial expressions using computer vision
- Recognized as one of the top performers and received a job offer

#### Game Development

2017 - 2019

- Specified Destiny of Khando responsible for the full development (30k downloads)
- See Fall Royale responsible for the design and art (100k downloads)

#### Miscellaneous

Programming Python, Java, Kotlin, C++, MySQL

Software Git, Languages Git, Languages Languages Italian (native), English (professional), Chinese (intermediate)
Walking, hiking, climbing, yoga, running, reading, and cooking