Xingjian Bai

CONTACT   xingjian.bai@sjc.ox.ac.uk   86-18611170179

EDUCATION   **MMathComSci, Mathematics and Computer Science**   **June 2023**
University of Oxford, Oxford, U.K.
First Year: Gibbs Prize (CS ranking 1/39), Distinction
Second Year: Distinction

EXPERIENCE   **Oxford Mathematics Institute**, **Research Intern**,   **July 2022**
Designed a normalized robustness metric for Neural Networks using optimal transport theory; outperformed all existing metrics in efficiency; conducted experiments on many SOTA robust training schemes. Funded by St John's college special grant and Mathematics Institute.
NAACL, Workshop on Online Abuse and Harms, **Reviewer**,   **March 2022**
Served in the Committee for WOAH 2022. Reviewed two submitted papers.
Megvii Research Lab, **Researcher Intern**,   **August 2021**
Interned at the Intellectual Computing team, Megvii Research Institute. Implemented and tuned state-of-the-art ViT-based models to deal with image copy detection.
Oxford AI society, **Student Researcher**,   **February 2021**
Researched on multimodal machine learning methods to detect hateful memes. Co-authored a paper accepted by the Workshop on Online Abuse and Harms, NAACL.
Oxford Strategy Group Digital & Tencent, **Project Lead**,   **April 2021**
Led a team of 5 to evaluate AI recommendation systems in JOOX, a music platform.
Modux, **Software Developer**,   **December 2020**
Developed a cybersecurity tool for padding oracle attack on Cipher Block Chaining.
Stanford InfoLab, **Independent Researcher**,   **December 2019**
Proposed a Graph Convolutional Neural Networks structure to detect online hateful users on Twitter; achieved SOTA accuracy; authored an academic report.

HONORS   **Gold Medalist**, Northwestern Europe Collegiate Programming Contest   **2022**
Outstanding Winner & **best paper** (top 2 / 2461),
37th Mathematical Contest in Modeling (**MCM**)   **2021**
Silver Medalist, Northwestern Europe Collegiate Programming Contest   **2021**
2nd Place, MathWorks Minidrone Competition for EMEA 2021   **2021**
Finalist, Huawei European High Performance Challenge   **2020**
Winner (1 out of 66), *Hack the hackers' hack*, Oxford Hackathon   **2020**
Full score & national 1st place, USA Computing Olympiad (**USACO**)   **2019**
National 1st place, Canadian Computing Olympiad (**CCO**)   **2018**
Silver medalist, Chinese National Olympiad in Informatics (**NOI**)   **2018**

PROJECTS   **Bootcamper**, **ML for Alignment Bootcamp, Redwood Research**,   **2022**
Intense 3-week program at Berkeley focusing on ML interpretability tools and AI alignment. Experimented with WideResnet, GPT-small, Stable Diffusion, etc.
Organizer, **Oxbridge Programming Varsity**,   **2021**
Organized the Oxbridge Programming Competition 2021 (50+ participants). Designed questions, implemented solutions, and gave presentations on advanced algorithms.
ML Trainee & Researcher, **DeeCamp, Sinovation Ventures**,   **2020**
Invited as the youngest participant to this advanced AI training camp; proposed a model to make tick-size trading in foreign exchange market.

SKILLS AND   **Languages:** Proficient in C++, Python; experienced in Java, Scala, and Haskell.
INTERESTS   **Interests:** Go (Weiqi), tennis, jogging (10K PB: 42 mins), science fictions.