YUAN HE

PhD Student in Computer Science

University of Oxford

CONTACT

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EDUCATION

University of Oxford — 10/2020 – Present — Oxford, UK

Doctor of Philosophy in Computer Science

University of Edinburgh — 09/2016 – 07/2020 — Edinburgh, UK

BSc (Hons) Artificial Intelligence and Mathematics

*First class degree; Ranked **Top 1** in Artificial Intelligence and Mathematics; Final project led to a **publication**.*

SKILLS

Expertise		*Programming Languages*	
Knowledge Graphs	●●●●●	**Python, Java, Kotlin**	●●●●●
Machine Learning	●●●●●	**Bash, Haskell, HTML/CSS**	●●●●○
Natural Language Processing	●●●●●	**C/C++, MIPS**	●●●○○
Languages		*Programming Framework*	
Mandarin, English	●●●●●	**Pytorch, Android**	●●●●●
Scientific Writing		*Mathematical Programming*	
Latex	●●●●●	**Matlab, R, Maple**	●●●●○

EXPERIENCE

Oxford-SRUK Ontology Alignment

Jan 2021 - Present — Oxford, UK

Doctoral Researcher; Department of Computer Sicene, University of Oxford

*Working on the ontology alignment research project funded by Samsung Research UK (SRUK); the amount of the grant is **£26K**.*
Details to be updated ...

AACL-IJCNLP Conference Presentation

Dec 2020 — Online

Speaker & Paper Author; AACL-IJCNLP 2020

Presenting the paper (see Publications) accepted by AACL-IJCNLP [video].

MAT Marking

Nov 2020 — Oxford, UK

Marker; Mathematical Institute, University of Oxford

Participating in the marking of Maths Admissions Test (MAT); an important test for shortlisting candidates for the interview.

Business Plan for IMPACT System

Sep 2020 — Online

Data Analyst; Work from Home

Our business plan for the Implantable Microsystems for Personalized Anti-cancer Therapy (IMPACT) system has won top prizes in some venture contests (see HONORS & AWARDS). IMPACT is a 5-year, £5.2M research project, funded by an EPSRC Programme Grant, to develop new approaches to cancer treatment, using implanted, smart sensors on silicon, fabricated in the University's Scottish Micro-electronics Centre.

Searchive: Search Engine for Arxiv

Jan 2020 - Mar 2020 — Edinburgh, UK

Project Leader & Software Developer; School of Informatics, University of Edinburgh

Participating in the prototype development of the search engine for Arxiv as the project leader and developer.

Teaching Support
Jan 2019 – May 2019 | Edinburgh, UK

Teaching Assistant: School of Informatics, University of Edinburgh

Undertaking the role of Lab Demonstrator in the course: Reasoning & Agents.

Coinz: Android Game for Virtual Coins
Oct 2019 - Dec 2019 | Edinburgh, UK

Software Developer; School of Informatics, University of Edinburgh

Participating in the individual project aimed at designing and implementing a multiplayer online game called Coinz.
The basic activities of this game are collecting, exchanging virtual coins and discovering a strategy of becoming "richer" than other players. The highlight of this game is the "alchemy" function which motivates the players to customize their trading strategies.

Multilingual Machine Transliteration
Jun 2018 – Aug 2018 | Edinburgh, UK

Research Intern; Edinburgh NLP Group, University of Edinburgh

Working on the NLP research project: Multilingual Machine Transliteration.

Initially, it was a short-term research project aimed at exploring NLP techniques for improving the neural model on the multilingual transliteration task. It was later extended to my undergraduate final project and our work has led to a publication about English-to-Chinese transliteration (see Publications).

Research Support
May 2017 – Dec 2019 | Edinburgh, UK

Research Assistant; Business School, University of Edinburgh

Working on the programming-related parts of several finance research projects led by Dr Hang Zhou.

Social Media, Financial Reporting Opacity and Return Co-movement: Evidence from Seeking Alpha

- Data collection task: extracting finance social media data using the web crawler technique.
- The relevant paper is accepted at the Journal of Financial Markets.

Private In-house Meeting and Crash Risk

- Textual analysis tasks: ① Analyse the readability & sentiment of the firm-specific information disclosed by companies through investor in-house meeting reports; ② Compute the similarities among investor in-house meeting reports; ③ Build a general machine learning model for documents in bag-of-words representation to select useful information from the investor in-house meeting reports.
- The relevant paper is under revision and resubmission.

HONORS & AWARDS

Received the Research Grant from Samsung Research UK (SRUK).
Jan 2021 [Amount: **£26K**]

Received the Joint Class Prize for Top Performance in AI & Maths at School of Informatics, University of Edinburgh.
Oct 2020 [Certificate]

Received Web of Data Course Certificate issued by EIT Digital through Coursera.
Nov 2020 [Certificate]

Won the Golden Award in China College Students' 'Internet+' Innovation and Entrepreneurship Competition.
Nov 2020 [Award List]

First Prize in KYOTO International Entrepreneurship Contest For University Students.
Dec 2020 [Award List]

PUBLICATIONS

[1] Yuan He and Shay B. Cohen. “English-to-Chinese Transliteration with Phonetic Auxiliary Task”. In: *Proceedings of the 1st Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics and the 10th International Joint Conference on Natural Language Processing*. Suzhou, China: Association for Computational Linguistics, Dec. 2020, pp. 378–388. URL: https://www.aclweb.org/anthology/2020.aacl-main.40.