YUAN HE

PhD Student in Computer Science

CONTACT

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SKILLS

Expertise

Knowledge Graphs ●●●●●
Machine Learning ●●●●●
Natural Language Processing ●●●●●

Programming

Python, Pytorch ●●●●●
Latex, Bash ●●●●●
Java, Kotlin, Android ●●●●○
Matlab, R, Maple ●●●●○
Haskell, HTML/CSS ●●●●○
C/C++, MIPS ●●●○○

Languages

Mandarin ●●●●●
English ●●●●●

HONORS & AWARDS

- Received the Joint Class Prize for Top Performance in AI & Maths at School of Informatics, University of Edinburgh.
  10/2020 [Certificate]
- Received Web of Data Course Certificate issued by EIT Digital through Coursera.
  11/2020 [Certificate]
- Won the Golden Award in China College Students' 'Internet+' Innovation and Entrepreneurship Competition.
  11/2020 [Award List]
- First Prize in KYOTO International Entrepreneurship Contest For University Students
  12/2020 [Award List]

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
Ranked Top 1 in the degree of Artificial Intelligence and Mathematics.

EXPERIENCES

Conference Presentation — Dec 2020 — Online
AACL-IJCNLP 2020
Present the paper (see Publications) accepted by AACL-IJCNLP virtually [video].

MAT Marker — Nov 2020 — Online
Mathematical Institute, University of Oxford
Participate in the marking of Maths Admissions Test (MAT), which is an important test for shortlisting candidates for the interview of entering University of Oxford.

Teaching Assistant — Jan 2019 – May 2019 — Edinburgh, UK
School of Informatics, University of Edinburgh
Undertake the role of Lab Demonstrator in the course Reasoning & Agents.

Research Intern — Jun 2018 – Aug 2018 — Edinburgh, UK
Edinburgh NLP Group, University of Edinburgh
Working for the NLP research project: Multilingual Machine Transliteration.

Research Assistant — May 2017 – Dec 2019 — Edinburgh, UK
Business School, University of Edinburgh
Working for several NLP & Coding in Finance projects led by Dr Hang Zhou.

Software Intern — Jul 2017 – Aug 2017 — Singapore
S&S IT
Working for the development of an accounting software.

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.

PROJECTS

Business Plan for the project: Implantable Microsystems for Personalized Anti-cancer Therapy (IMPACT)

- Our business plan for the 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 Microelectronics Centre.

Search Engine Development: Searchive

- A group project aimed to develop a prototype search engine used for searching the scholar articles stored in arxiv.

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 the project associated to my undergraduate thesis and resulted in the subsequent publication (see Publications).

Two NLP & Coding in 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 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 of companies disclosed by 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.

Android Game Development: Coinz

- An 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.
