
BOFAN ZHANG

Manchester M50 3BG ♦ 7833987960 ♦ bofan.zhang@postgrad.manchester.ac.uk

EDUCATION

Master of Science: Health Data Science, Expected in 09/2024

The University of Manchester - Manchester, UK

Bachelor of Advanced Computing: Computer Science & Software Developing, 07/2023

The University of Sydney - Sydney, AU

- Degree Awarded with **First Class Honour**
- 74/100 WAM
- 78/100 Honor Result
- Web Application Development (88/100 High Distinction)
- Computer Science Project (90/100 High Distinction)
- Usability Engineering (86/100 High Distinction)
- Pervasive Computing (89/100 High Distinction)
- CS Research Thesis (82/100 Distinction)

RESEARCH EXPERIENCE

- **Participation in Buddy-Compiler Project**

Buddy-Compiler As a Service Project.

Make the pipeline as a web service to help people with no hardware to be able to run their programs in MLIR language online.

Published in Euro-LLVM 2023 Workshop lighting talk.

- **Melanoma Screening with Change Detection (Thesis)**

Proposed a new Transformer Based neural network to help better detect the changes within melanoma images with noise.

Introduced a novel approach on noise image semantics analysis involves the grayscale values to improve the region segmentation.

Introduced a novel approach on clustering and merging images semantics tokens to improve the changed region recognize.

The experiments showed higher accuracy compared to normal semantic-based change detection networks in melanoma images.

- **Graph-Planner, Mind map based editor for PDDL Language (Under Review)**

Science and Technology Special Funding from the Chinese Academy of Sciences (XDA0320000)

Proposed the first graph mind map based editor for PDDL problems.

Build an fully online, web application to let users creating, modifying and generating PDDL problems from our service and provide the integrated solver.

- **Recipient for School of CS (Capstone Project)**

Introduced an online dashboard with chatbot which language models involved to answer students questions, booking meetings with staffs.

The chatbot trained with university own course information and achieve the reply accuracy to 93%.

PUBLICATIONS

- **Buddy-CAAS: Compiler As A Service for MLIR**

Liu, Z., Zhang, H. and Zhang, B. (2023) *Buddy-CAAS: Compiler as a service for MLIR - llvm.org*,

Available at: [https://llvm.org/devmtg/2023-05/slides/Lightning-Talks/05-Zhang-Buddy-](https://llvm.org/devmtg/2023-05/slides/Lightning-Talks/05-Zhang-Buddy-CAAS-CompilerAs-AService-forMLIR.pdf)

[CAAS-CompilerAs-AService-forMLIR.pdf](https://llvm.org/devmtg/2023-05/slides/Lightning-Talks/05-Zhang-Buddy-CAAS-CompilerAs-AService-forMLIR.pdf)

- **Contemporary Computer Network Information Security and Protection Strategy**

ZHANG, B. (2022) 'Contemporary Computer Network Information Security and Protection Strategy',

Engineering Technology, ISSN: 1671-5586, 09, pp. 92–94.

PROFESSIONAL EXPERIENCE

Tutor, 02/2023 - 07/2023

The University Of Sydney – Sydney, AU

- Teaching Assistant on Usability Engineering(COMP5427)
- 2 hrs/week teaching time
- Help lecturer mark exams, assignments and student's weekly homework
- Motivated students towards learning and studying to build self-confidence and reduce fear of failure.
- Help students better understand the course

Front-End Web Developer, 09/2022 - 07/2023

Institute Of Software Chinese Academy Of Science

- Developing Buddy-Compiler As a Service project which is part of MLIR-China Group, aimed to help people with no hardware to be able to run their programs in MLIR language. (<https://buddy.isrc.ac.cn/>) (Euro-LLVM 2023 workshop lighting talk)
- PDDL Graph-Planner Project, the first graph map-based editor for PDDL language, with integrated solver and ChatGpt to support problem building. (<https://graphplanner.isrc.ac.cn/>)

Front-End Web Developer, 06/2022 - 08/2022

Hangzhou QuanCheng Intelligent Software – HangZhou, CN

- Working on PDDL related project
- Maintain lab's website applications

Web Development Intern, 12/2021 - 05/2022

Nanjing Institute Of Software Technology

- Develop Gentoo RISC-V related package submission record support system. Which support users to see commit records and record details/summary data. (<https://whale.plctlab.org/rvstat/>)
- Develop an Ecosystem Tracking System(ETS) for RISC-V to provide users with level of support for software/features based on RISC-V hardware. Build software/feature database for RISC-V CPUs/SOCs /Boards.
(<https://github.com/plctlab/riscv-ecosystem-tracking>)

SKILLS

- Web Development
- Machine Learning
- Python, JavaScript, Java, C
- Data Analysis