## Huayu Qin

38 Bower Road, Sheffield S10 1ER 0 7512 519806 20091579@mail.wit.ie

Linkedin Huayu Qin

#### **Education**

# The University of Leeds | MSc in Advanced Computer Science (Artificial Intelligence) Kingdom

United

• Distinction

2021 - 2022

• Modules: Artificial Intelligence (84); Data Science (72); Data Mining and Text Analysis (76); Big Data System (70); Algorithms (78); MSc Project / Dissertation (70)

## South East Technological University | BSc (Hons) in Software Systems Practice

Ireland

• 1<sup>st</sup> Class degree

2020 - 2021

• Modules: Web Development; System Security; Business Analysis; Web Service Testing

Nanjing University of Information Science & Technology | BEng in Software Engineering

China

• Modules: Software Testing; OOP (object-oriented programming); Data Structure; Database

2017 - 2020

## **Research Experience**

#### **Software Engineer Intern | Python**

China

Taicang Branch, Institute of Computing Technology, Chinese Academy of Sciences

Summer 2020, Summer 2021

- Developed and implemented advanced image detection algorithms for Bubble Wrap Medication recognition
  using transfer learning and fine-tuning techniques, resulting in a 90% accuracy rate and improved efficiency in
  the sorting process
- Led the development and deployment of an iterated defect detection feature, resulting in a 15% improvement in accuracy and a significant increase in product quality and customer satisfaction

### **Research Projects**

#### Multimodal Models of Social Media Misogyny Memes | Python

2022

- Implemented TensorFlow architecture for data feature analysis, incorporating Transform-based BERT and VIT models for extracting text and image features
- Utilized attention mechanism to merge extracted features and inputted into a fine-tuned convolutional neural network, resulting in a recognition rate of 71% for misogyny memes in the test set, an improvement of 8% over the baseline
- Evaluated multi-label and single-label models, finding that multi-label modeling resulted in a 10% increase in accuracy

#### **Technical Skills**

- Proficient in Python and Pandas for data analysis, including extraction, cleaning, manipulation, and visualization
- Proficient in PyTorch and TensorFlow framework, including expertise in building models using transformer architecture
- Proficient in SQL and experienced in retrieving data from multiple tables in a database using complex query statements

#### Academic awards

- Scholarship: International Masters Engineering and Computing Scholarship | The University of Leeds
- Scholarship: University second-class scholarship | Nanjing University of Information Science & Technology
- Title: University Excellent Student Cadre | Nanjing University of Information Science & Technology