## **DU XINYU**

Email: duxinyu0915@outlook.com | Tel: 53395772

#### **EDUCATION BACKGROUND**

### Southeast University(SEU)

Sep. 2017 – 2021

Bachelor of Computer Science, Software Engineering

GPA: 3.64/4.0; 87.96/100

Courses Attended: Object-Oriented Programming: 95; Principles of Compiler: 97;

Analysis and Design of Algorithm: 93; Information Retrieval: 97;

### Hong Kong University of Science and Technology(HKUST)

Sep. 2023 – 2024

MSc of Information Technology (Msc IT)

GPA: 3.78(23 Fall)

Courses Attended: Blockchain and Smart Contracts:  $A^+$ ; Machine Learning:  $B^+$ ;

Data Mining and Knowledge Discovery: B<sup>+</sup>; Computer Network: A<sup>+</sup>

### **WORK EXPERIENCE**

### Online Video Business Unit, Tencent Technology Co. LTD

Shenzhen

Client Development Engineer Client Development Engineer Jul. 2020 – May. 2021(internship)

Aug. 2021 – Aug. 2022(employee)

Technical knowledge involved: Java, Kotlin, Objective-C, Git.

- Completed daily iterative development on Android and iOS platforms, with one iteration per week, including code testing, bug fixing, and risk control measures.
- Maintained and expanded the business logic of user payment scenarios, optimizing the code structure with knowledge of Java design patterns and software engineering principles.
- Collaborated with other departments to complete cooperative projects, including working with the WeChat payment team to achieve new payment scenarios in Tencent Video and improve the user VIP conversion rate.
- Explored performance improvements in different user scenarios and refactored weak code structures to enhance overall system efficiency. Contributed to several optimization initiatives, including the complete refactor of the VIP homepage, restructuring of the video player, and VIP page loading optimization.
- Participated in technical reviews, requirements reviews, and code reviews for the project.

### PROFESSIONAL EXPERIENCE

## Crypto-Fintech Lab, HKUST Software Development Engineer

Hong Kong

2023 - 2024

Technical knowledge involved: JavaScript, Node.js, Next.js, Solidity, Python, FastAPI, openAI API.

- Worked as a Full-Stack and Crypto Engineer at Cropo Network (startup). Conducted research on crypto technology and kept up-to-date with the latest events in the field.
- Developed and maintained the company's project homepage, while also engaging in daily development tasks.
- Participated in AI project development. Fine-tuned the Llama2 model to learn the coding ability and experimented with the latest techniques like Longlora to enhance performance.
- Implemented a recommendation chatbot based on a perfume dataset using OpenAI API and integrated it into a webpage. Utilized Embedding and GPT API to enable the GPT's question-answering capabilities based on provided knowledge base.
- Trained an AI writing assistant by fine-tuning the GPT3.5 model with model essays, enabling it to polish the input essays in a specific tone.

## $Multilingual\ KBQA\ model,\ SEU\ Knowledge\ Graph\ Lab$

Oct. 2018 – Oct. 2020

Technical knowledge involved: Python, Gurobi.

Member

- Conducted research on the latest technology for multi-source Knowledge-Based Question Answering (KBQA) to explore its feasibility for use in multilingual KBQA.
- Implemented the pipeline model for multi-source KBQA and modified it to adapt to multilingual scenarios.
- Conducted experiments on the new model and compared it with state-of-the-art models, resulting in a research paper detailing the findings.

# Android Application Design of Improving Concentration, SEU *PM (project manager)*

Nanjing

Nanjing

Sep. 2019 - Oct. 2019

Technical knowledge involved: Java, Android, UML.

- Developed the overall project plan and contributed to the application design process.
- Managed the project's development progress and handled demand scheduling.
- Successfully completed the development of the main page and ensured seamless data transmission across different scenarios.

### Segmentation of Brain Tissue Based on Neural Network, SEU

Nanjing

Nov. 2018 – Nov. 2019

Technical knowledge involved: Python, Tenserflow.

- Conducted research on state-of-the-art technology in the medical field and identified the best approach for the project.
- Implemented and trained the U-net model to accurately identify brain tissue.

### **HONORS & AWARDS**

| Outstanding Individual of department(Tencent)  | 2021/12 |
|--|---------|
| Social Work Merit Award  | 2020/12 |
| Provincial Third-prize Award in China Undergraduate Mathematical Contest in Modeling | 2019/09 |
| Outstanding Student Leader Prize of Southeast University                             | 2019/11 |
| Nord Logistics Scholarship of Southeast University                                   | 2019/06 |
| Merit Student Prize of Southeast University  | 2018/12 |

#### SKILLS

Member

Java, Python, Kotlin, JavaScript, Solidity, TypeScript, SQL, React, Node.js, Next.js Basic knowledge of crypto, data-mining and mechine-learning.