# YIHUI GONG

Duck street, Southampton, United Kingdom SO14 3HZ ◆ H: 07529963251 ◆ M: 07529963251 ◆ gyh1429107530@gmail.com

#### PROFESSIONAL SUMMARY

As a highly skilled computer science graduate with a deep understanding of data statistics and mathematical analysis, I have a proven track record of developing both web-based and native Java applications. My fluency in both Chinese and English allows me to effectively communicate and collaborate with diverse teams. My expertise in data structures, and proficiency in data mining and machine learning algorithms such as decision trees, clustering recognition, logistic regression, and Bayesian methods, enables me to analyze and model large data sets with precision and efficiency. I am adept at implementing business requirements and constructing models using Python and other big data technologies, and I am known for my strong sensitivity to data and logical thinking. I am a team player with excellent collaboration skills, and I am skilled in inter-departmental communication and coordination. My strong sense of self-motivation and goal-orientation allows me to work efficiently under pressure and deliver results. I am also experienced in using Vue, Python, and FastAPI to develop web applications. I am confident that my skills and experience make me a valuable asset to any organization.

#### Work history

**Software Engineer**, 11/2022 – 01/2023

myself work – Southampton, United Kingdom

As a software developer, I have experience building end-to-end encrypted chat systems using Vue.js, Python, and FastAPI. My responsibilities include

- Designed and built the front-end interface using Vue.js
- Implemented secure communication protocols using Python and FastAPI
- Integrated the system with cryptographic libraries to ensure secure messaging
- Optimized the system's performance and scalability, reducing response time by 50%
- Improved user satisfaction by 80% through the implementation of secure messaging capabilities
- Implemented strong security protocols to ensure the privacy and protection of user data
- Demonstrated expertise in building secure web applications
- Proven ability to optimize system performance and scalability
- Strong understanding of data encryption and security protocols.

Machine Learning Developer, 09/2022 – 01/2023

Myself work – Southampton, United Kingdom

As a machine learning developer, I have experience in utilizing deep learning to develop neural style transfer systems. My responsibilities included researching and implementing state-of-the-art neural style transfer algorithms using frameworks such as TensorFlow and PyTorch. I was responsible for data pre-processing, training, and fine-tuning models, as well as evaluating their performance. Additionally, I worked on integrating the system into a web-based application, enabling users to easily transfer the style of one image to another. Through this project, I gained expertise in deep learning, computer vision, and building end-to-end machine learning systems, which I believe will be valuable assets in a machine learning development role.

**Team Leader**, 10/2022 – 11/2022

#### Huawei UK Tech Arena – Southampton

- Our job is to create lossless designs for geometry/mesh compression schemes
- Research on text and image analysis algorithms

- Responsible for text and image classification, clustering model optimization, and WEB interface optimization
- Responsible for the whole project schedule, execution & in-time delivery
- Responsible for mentoring others, facilitating and monitoring mentor plan
- Build up other members to complete task separately
- Utilize knowledge and expertise gained through practical experience to identify, analyze, and solve a wide variety of problems
- Technologies used: SVM+TFIDF, LSTM recurrent neural network + word vector, topic clustering algorithm, hierarchical clustering, summary algorithm, django framework

**Java Developer**, 01/2022 - 04/2022

### Myself work – Southampton, United Kingdom

- Developed and implemented a distributed storage system using Java
- Utilized Java's built-in libraries and frameworks such as Java NIO and Apache Kafka to implement distributed file storage
- Implemented data replication and sharding to ensure data durability and availability
- Utilized ZooKeeper for configuration management and coordination of the distributed system
- Implemented load balancing to distribute client requests across multiple nodes
- Optimized system performance and scalability through the use of multithreading and asynchronous processing
- Implemented data security by using encryption and access control mechanisms
- Collaborated with the team to design and implement a user-friendly web-based management interface for the system
- Conducted extensive testing and debugging to ensure the reliability and stability of the system
- Developed and maintained detailed documentation for the system, including system architecture, design, and user guides
- Strong understanding of distributed systems and distributed storage technologies
- Experience with Java and related frameworks and libraries
- Familiarity with ZooKeeper, Apache Kafka
- Proven ability to optimize system performance and scalability
- Strong understanding of data encryption and security protocols
- Experience with testing and debugging distributed systems
- Strong understanding of web-based management interface design and implementation
- Strong documentation and communication skills
- Demonstrated ability to work well in a team environment and to collaborate effectively with cross-functional teams.

Leader, 12/2021 - 03/2022

## **Niubility Group** – Southampton

- Our job to design a more efficient programming language by using Haskell
- Conducted research on existing programming language on advantages and frameworks
- Led the team to design programming language syntax and coding
- Campus Activities

#### SKILLS

• Familiar with data structure, master data mining and • Sense of goal, high work efficiency and strong machine learning algorithms (Decision Tree, Cluster

resistance to pressure

Recognition, Logistic

- Regression, Bayes, etc.). Rich experience in massive data machine learning algorithm application; Sensitive to data, strong logical thinking,
- Able to effectively implement business requirements and complete model building. Good at classification, skilled in using Python, SAS, R and
- Other qualitative and quantitative modeling analysis of big data.
- Excellent team player, strong sense of cooperation, good at inter-departmental communication and collaboration, strong self-motivation and

- Office skills: Proficient in
- Microsoft Office(Word, Excel and PPT)
- Programming:Python,Java,Machine Learning,Computer Vision,Javascript
- proficient mastery of vue, fastapi framework

- 1	٦.						
-	ĹD	TT	$\sim$	۸П	CT.	$\sim$	TA
		,,,,		4			IIN

**Bachelor of Computer Science Southampton**, Expected in 06/2023 **University of Southampton** - UK