Tianxiang Song

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Currently in my second year studying Computer Science in the University of Nottingham. Interested in game/web development and machine learning, eager to explore many aspects of software development, as shown by relevant research and hobby projects.

Education

University of Nottingham   October 2019 – Present

<u>BSc Computer Science with Artificial Intelligence</u>
with the first two year in Ningbo Campus

First-class in modules including
- Computer Fundamentals
- Mathematics for Computer Scientists
- Software Engineering
- Systems and Architecture
- Programming and Algorithms
- Programming Paradigms
- Fundamentals of Artificial Intelligence
- Developing Maintainable Software

High School in China   September 2016 – July 2019

First-class in all modules including English, Mathematic, Chinese and Science. Ranked top 5% of the province in the National College Entrance Examination.
<u>Marks in percent</u>
- Chinese   70.7%
- Math   86.0%
- English   88.0%
- Science   75.7%

Relevant Experience

<u>Application Project</u>

Logo Retrieval Tools   June 2021 – Present
ML Architect

- Responsible for producing CNNs in a logo detection and retrieval software for Customs District, Ningbo China
- Handling and training on large datasets (such as Logo-2k+ with over 2k logo classes and 167k images)
- Experienced in Python libraries OpenCV, TensorFlow, PyTorch and scikit-learn

Group Project (Y2)

Codenames – Game AI   Oct 2021 – Present

Technical Leader

- Designing and maintaining a multi-player online board game hosted on web server
- Responsible for game AI model
- Took part in client-server communication and multi-player synchronization
- Help with Git issues and GUI design
- Project website http://www.codenames.uk/

Research Projects

Comparison of Sentiment Analysis Methods on a Novel Administrative Process Dataset

Jan 2021 – Present

- Took part in collecting datasets from the Faculty Office of Science and Engineering,University of Nottingham, Ningbo China
- Proposed a new supervised learning method for sentiment analysis
- Implemented previous NLP models and conducting tests on them
- Research paper in progress

Building a Software to Visualize and Manipulate Graphs or Clustered Graphs in 3D

June 2021 – August 2021

- Assisted in the process of building and maintaining the software that visualise data in 3D graph
- Using WebGL for rendering 3D graphics
- Learned basic idea of TypeScript, React.js and Three.js

Hobby Projects

The personal hobby projects demonstrate knowledge in several programming languages and interests in some aspects of software development such as game/web development and machine learning. These projects can be viewed at https://github.com/stx666michael.

Technical Experience

- Proficient in *Python* as used in most of projects
- Experienced in *Java* as used in most of programming assignments
- Experienced in *HTML, CSS, JavaScript*, and client-server communication using *Socket.IO*
- Experienced in web framework *Flask*
- Experienced in *Amazon Web Services*
- Learned *C, MATLAB, GeoGebra*, and *SQL* as part of programming modules
- Learned fundamentals of *C++* and *TypeScript*
- Proficient in *Adobe Photoshop* as used in poster making during organization's work
- Experienced in video editing using *iMovie* and *Adobe Premiere*.
- Experienced in *Microsoft Office*

Additional Experience

Internship | Acorn Academy   July 2021
- Assisted in English class, LEGO / VR labs and sports class for primary school students in a summer camp organized by Major Oak Education

Volunteer | Feel Lanka 17.1 | AIESEC   January 2020 – February 2020
- Took part in capture photos and videos during visits in Sri Lanka
- Created marketing materials for each destination

Extra-curricular Activities

Vice President | Detective Agency   October 2020 – June 2021
- Organised two events, each for around 10 teams and 60 players
- Hosted 5 staff meetings for 20 people
- Regularly participant in various activities

Staff | Japanese Communication Club   October 2020 – June 2021
Staff | Science and Engineering Student Association
                                                October2019 – June 2020
Staff | Nottingham Alumni Association Ningbo October 2019 – June 2020
- Served as Art Designer and produced over 7 propaganda materials
- Awarded Outstanding Staff of NAAN in 2019
- Regularly participant in various activities

I also enjoy travelling and sports like badminton, table tennis and swimming.

References

References are available on request.