Yangtao Ge

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EDUCATION

- **University College London** London, UK
  Master of Engineering (MEng) in Computer Science; Avg. Score: 74/100 *Sept. 2018 – Present*

- **University College London** London, UK
  Undergraduate Preparatory Certificate; Avg. Score 86/100 *Sept. 2017 – June. 2018*

PERSONAL SKILLS

- **Java**: Excellent skills in building server-based applications by using Java including Netty protocol server developing and Spring Boot web server developing over actual production environment in large scale projects.

- **React Native**: Proficient developing using React Native and Redux to implement mobile app for both Android and IOS Platform and creating releases using TestFairy.

- **JavaSript, TypeScript & Node.js**: Good understanding of JavaSript and its extension language and able to use those languages to create both backend (Express) and frontend (React.js).

- **Cloud Services**: Industrial experiences in both Azure and AWS in web server and database services.

- **Git & Verison Control**: Good knowledge of using git and Github to do local and remote version control.

- **SQL & NoSQL**: Good knowledge in managing SQL databases on Java Spring Boot using JPA and using node.js to manipulate NO-SQL database such as AWS DynamoDB using Node.js.

- **Hardwares**: Unversity project based experiences for Arduino, CC3200 and Intel FPGA Board.

- **Other Programming Languages**: C/C++, Python, Haskell, Shell, C#, LaTeX.

- **Multi-Language User**: Proficient English and Chinese user for communication and writing, Waystage level French.

WORK EXPERIENCE

- **Healios** London, UK
  React Native Developer *Dec. 2020 - present*
  - **React Native**: Using React Native Framework and TypeScript to develop a NHS app called *ThinkNinja* for children from 10 to 18 years old and allow them to learn mental health and emotional wellbeing.
  - **TypeScript & Linting**: Using and configuration TypeScript and Eslint to ensure the robustness of the code across the developing team.
  - **Redux and Redux-Saga**: Using Redux to maintain and transient the app state and using Redux-Saga as the Redux middleware to handle the side effect of the application.
  - **Internationalization**: Implementing the internationalization framework to support multiple languages and creating the customized Text component which allow other developers to use them as international language label and replace the display in configuration files.
  - **TestFairy**: Using and maintaining the TestFairy tool to provide app distribution within the developing team and create countinues integration pipeline for app build.

- **EMIS Health Group** London, UK
  Analytic Team Software Developer *Jun. 2020 - Sept. 2020*
  - **Node.js and TypeScript**: Using Node.js to produce a middleware to generate a many-to-many mapping between two service components within the EMIS Clint project and publish it onto the company code base.
  - **API Platform**: Creating and deploying the interal-used API onto Amazon Serverless services and implementing the Jest test to ensure the robustness from high coverage test suit.
  - **AWS Cloud Services**: Using AWS CloudFormation to maintain DevOp pipelines and DynamoDB schema for the project on the cloud, AWS IAM strategies are used for ensuring the minimum access control.

- **Skogame Ltd.**   Shanghai, China
  Mobile Gaming Backend Developer   *Jul. 2019 - Sept. 2019*
    - **Java Web Server on Netty**: Developing the logic of Top-up function with its API which allows player can charge money to buy game currency and Developing other related time-limited top-up activities.
    - **Unit & Integrate Testing**: Developing a robot-user sample and a Tester app for testing the maximum capacity and vulnerability of the game server.
    - **Databases**: Maintaining the two online servers and inspect both MySQL and Redis databases to ensure the working performance of the game server.

Projects

- **Smart Street Cleaning IoT Project**   London, UK
  Team Leader & System Designer
    - **Project Idea & Architecture**: Making the project brief and MoSCoW list for producing a Internet of Things system to detect the dirtiness of the Street and propose the system architecture diagram as a reference.
    - **UI prototype**: Developing the user interface using React.Js to produce website which indicates the dirtiness level of the streets on certain area on Google Map.
    - **Machine Learning Research**: Investigating the relationship between parameters captured from the sensor and the dirtiness level by statatistical model and machine learning techniques and reserch the possibility using RNN to identify the garbage on the street from the CCTV images.

- **AMEX Challenge Hackathon**   London, UK
  Full Stack Developer   *Best Design Prize*
    - **Avatar Modeling**: Using *Blender* to create user avatars and import into the scene created by Unity3D, which includes modeling, sculpting and adding shader to the model.
    - **Script**: Adding user functions to the model using C#, this inlcudes simulating movements, displaying emotion create skeletal tracking on users' arm and fingers.

- **AI For The Common Good Hackathon**   London, UK & Paris, France
  Frontend Developer & Team Leader   *Top 3 Project Prize*
    - **Project Structure Designing**: Making the project brief and MoSCoW list for making a mobile web app for feeding language learning materials materials based on users' preference and chatting between other learners.
    - **Frontend UI Developing**: Developing the user interface using React.Js and Framework7 to make a Progressive Web App (PWA) for mobile phones and deploy on remote web servers.

- **Visual Mapping App for ANCSSC**   London, UK
  Backend Developer   *Score: 76/100*
    - **API Provider Developing**: Using Java Spring Boot to provide APIs for the frontend to obtain the NGOs' project coordinates and specific information of the project on Azure Web Server.
    - **Server Deployment**: Use Azure Web Server to deploy the API provider of the tool and initializing the Azure Pipeline to execute auto deployment.

- **Connecting System IoT Project**   London, UK
  CC3200 Board Developer   *Score: 90/100*
    - **System Architecture**: Creating the System Architecture on TinkerCAD and Fritzing to implement a system to detect whether the door is opened and report remotely.
    - **IBM Cloud**: Using IBM Cloud Internet of Things Platform to create a service to receive data from CC3200 by implementing a MQTT protocol and display the data using a website created by JavaSript.