Pinheng Chen

Full-stack Developer

EDUCATION AND WORKING EXPERIENCE

Master of Information Technology (M	ajor in Artificial Intelligence, Data	Science and Engineering)
University of New South Wales	Sydney, Australia	Feb 2022 - Feb 2024
Software Developer - Intern		
South Digital Technology Co., Ltd.	Guangzhou, China	Jul 2020 - Dec 2021
Bachelor of Geomatics (Major in GIS and	Surveying and Mapping)	
Shandong University of Science and Techno	ology Qingdao, China	Sep 2016 - Jun 2020
TECHNICAL STRENGTH		
Front-end: JavaScript, TypeScript, React.js, N	Next.is, Angular, D3.is	

Front-end:JavaScript, TypeScript, React.js, Next.js, Angular, D3.jsBack-end:C/C++, Python, Node.js, Clingo, .NET, Django, Docker, Kafka, PytestDatabase:PostgreSQL, Oracle, MongoDBDevOps:CI/CDDeep Learning:Pytorch, Tensorflow, Scikit-Learn, KerasData Analysis:Scala, Numpy, Pandas, MatplotlibBig Data:Hadoop, Spark, Google DataprocGame Development:Ureal Engine, Blueprint, BlenderImage Processing:OpenCV, BlenderCloud Services:Google Cloud, Amazon Web Services, Mircosoft AzureGIS/Geomatics:ArcGIS, AutoCAD, Surveying, GNSSAgile Project Management:Jira, Kanban

HIGHLIGHT PROJECTS

Software/Web Development

Smart PDF Reader

Project Overview: The project aimed to build a web software that can provide users with a smart PDF reader. The registered users can upload their PDF files to cloud storage space and manage their files. Also, they can use the cross-reference function when reading PDF files. Moreover, almost all citations and references of a paper can be shown visually through a scatter plot. **Main Job:**

- Front-end Part (React.js, Tailwind CSS)
 - * Customising PDF.js so that some functions can be changed (PDF.js)
 - * Cross-reference (PDF.js)
 - * Visualize citations and references in scatter plot (D3.js)
- Back-end Part (Node.js)
 - * Design and create interfaces
 - * User's identity authentication and private information management and encryption
 - * MongoDB and Google Cloud Buckets setup and management (MongoDB, Google Cloud Buckets)
 - * PDF files uploading, deleting, renaming, altering, etc.
 - * Extract the citations and references of the corresponding paper (Semantic Scholar)
- DevOps (CI/CD)

Site Selection and Routing of Offshore Wind Farm

Project Overview: The project aimed to help the local government select the optimum site location and route of offshore wind farms so that the government can minimise the cost, maximise the electricity generation, decrease the risk of being destroyed by disasters and protect the marine ecological environment.

Main Job:

- Virtual machine set up (VMware Workstation)
- Design and create interfaces (Node.js)
- Database installation, set up and maintenance (Oracle)
- Data fusion, integrating land and ocean geography data, land value, disaster, biodiversity data and wind resource data

Marine Disaster Monitoring Platform

Project Overview: The project aimed to help the local government monitor marine disasters, it integrates the data including seismic wave data, sea level data, climate data, etc. Once the marine disaster occurs, the platform can trigger the warning and give the corresponding solution which has been prepared in advance.

Main Job:

- Create a sample for software copyright application and help the company get the copyright of software in China
- Design and create interfaces (C++, QT Creator)
- Database installation, set up and maintenance (PostgreSQL)