Xuannan Dong | Resume

mailbox 5524, 4067 Miramar St. – La Jolla, CA

 (+1) (619) 310-3691   •   ✉ x3dong@ucsd.edu

Education

M.S. in Computer Science · 09/2021–06/2023
UNIVERSITY CALIFORNIA, SAN DIEGO · *La Jolla, CA, U.S*

B.S. in Electronic Engineering(Automation) and Artificial Intelligence · 08/2016–07/2020
UNIVERSITY OF SCIENCE AND TECHNOLOGY OF CHINA (USTC) · *Hefei, Anhui, China*
3.61/4.3, 86.16/100. Ranking:30/140.
2019, 2018, 2017 The First Prize Scholarship, School of Information Technology (TOP 6%)

Work Experience

WeRide · 06/2022–09/2022
SOFTWARE DEVELOPMENT INTERNSHIP · *San Jose, CA, U.S.A*

* Researches and develops SLAM and localization technology in autonomous-driving with a focus on visual-related algorithms, including visual-based mapping and odometry.
* Turns the algorithms into actual code running in the onboard computer and in the offline systems. Improves onboard localization performance, reliability and accuracy to make the autonomous.
* Improves onboard localization performance, reliability and accuracy to make the autonomous vehicles safer on the road.

Intel · 02/2021–09/2021
SOFTWARE DEVELOPMENT INTERNSHIP

- **SpeechUI App**
  * Developed an intelligent voice assistant web App, enabled users to order food, book tickets, navigate, etc, in an integrated platform. Built UI, frontend structure with **React**, **Redux**, and **Bootstrap**, designed dialogue processing flow to offer users prompt and accurate responses.
  * Implemented navigation part of the application. Applied Mapbox GL JS and related Plugins to support precheck for query, visualize realtime route information, intelligently offer route plan, etc.
- **NLP Data Collection Platform**
  * Designed frontend page for an NLP Data Collection Platform. Enabled users to input sample sentences, apply different NLP models, and labeled for the processed result.
  * Built Backend service for the platform. Received and processed **RESTful** request, applied **Apache Thrift** RPC framework to call NLU/NLP service, stored data and corresponding labels into **MongoDB** database.

Netease ThunderFire · 08/2020–11/2020
DATA MINING INTERNSHIP · *Hangzhou, Zhejiang, China*

* Collected and extracted game data with **Hadoop** and **MySQL**. Developed and maintained a Business Intelligence platform, visualized the analytic data with **Python Django** and **Vue**.
* Utilized machine learning methods to make predictions on game trends. Worked across Finance, Player Analysis and was responsible for strengthening the connection between game players and game producers.

Course Project

Parallel Computing Design · 04/2022–06/2022
C/C++ · *University of California, San Diego*

* Implemented the *Aliev-Panfilov cardiac simulation* and parallelize it with **MPI**. Optimized the inner calculating loops with cache locality and vectorization. Conduct strong scaling studies and find the best parallel computing geometry.
* Accelerated matrix multiplication for NVIDIA's Kepler GPU, buffered frequently accessed data in fast on-chip shared memory, applied the Memory Coalescing method. The performance reached over 400 Gflops on a matrix of size 256x256.

Distributed File Storage System · 01/2022–03/2022
GOLANG · *University of California, San Diego*

* Created a networked, cloud-based file storage service similar to Dropbox, users are allowed to synchronize files with "clouds". Multiple clients concurrently communicated with the service via **gRPC**.
* Improved the application with the fault tolerant feature based on **RAFT** protocol, which allow a collection of machines to work as a coherent group that can survive the failures of some of its members.

Skills

Programming Language C, JAVA, Python, MySQL, HTML, CSS, JavaScript.

Frameworks & Tools Node.js, React.js, BootStrap, Docker, Git.