Boyu CHEN

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EDUCATION

University of California, San Diego — San Diego, CA, U.S.
M.Sc in Electrical and Computer Engineering — *Sep. 2021 - Mar. 2023*
- Selected Courses: Data Structure, Networked Systems, Computer Architecture, Computer Vision

Zhejiang University — Hangzhou, Zhejiang, China
B.Eng in Electrical Engineering — *Sep. 2016 - Jun. 2020*

SKILLS

Programming Languages: C/C++, Java, Python, Golang, HTML/CSS, JavaScript, SQL, Matlab
Framework & Tools: Docker, Bootstrap, Spring Boot, React, Vue, Node.js, Git, Ajax, Flask, Express, RESTful, socket, MongoDB, Django

EXPERIENCES

iFLYTEK Co., Ltd. — Hangzhou, Zhejiang, China
Software & Machine Learning Intern, iFLYBUDS Consumer Business Group — *Jul. 2020 - Dec. 2020*
- Collected individual words from voice conversion engine; performed data cleaning; reorganized them into complete sentences according to natural language semantics; deployed the project via **python-flask**
- Analyzed conversation contents; utilized **Logistic Regression** to identify unstable network(90% accuracy)
- Implemented **TextRank** algorithm by calculating cosine similarity; extracted top 2 sentences as article summary

Purdue University — West Lafayette, IN, US
Research Assistant, Advisor: Meng Cui — *Jul. 2019 - Sep. 2019*
- **Deep Fog Imaging:** Built a spatiotemporally-gated detection system to filter out deep fog(scattering background and shot noise); yielded high resolution and contrast image; published the results on ***Optics Express***
- **Real-time Image Stabilization:** Generated triangle signals in vertical directions to control laser scanning speed; collected data gravity core as feedback for real-time image motion tracking and correction(200Hz)

SELECTED PROJECTS

YelpCamp Interactive Web Development — *Jul. 2022 - Aug. 2022*
- Deployed webpage with **Bootstrap**, used **Express** and **MongoDB** for realizing **RESTful API**
- Developed sign-in API(account & password creation) with **Passport.js** and **Node.js**
- Invoked Google Maps API to provide location guiding; implemented user data saving module

HIV-TRACE Graph Representation in C++ — *May 2022*
- Pre-processed HIV sequence data via **ifstream**(max: 10,000 edges), modeled it abstractly as undirected graph
- Implemented **Dijkstra's Algorithm** to find the shortest path and connected threshold given two patients

SurfStore Cloud Storage Service based on Dropbox — *Mar. 2022*
- Initiated interfaces for file saving and indexing in server and **gRPC** clients, allowing multiple concurrency
- Synchronized files of newer versions from cloud to local client; updated new/modified local files to the server
- Handled conflicts following "**whoever syncs first wins**"; deleted files marked with "tombstone"(0 hash value)

TritonHTTP(HTTP/1.1) Network Protocol Implementation in Golang — *Jan. 2022 - Feb. 2022*
- Formalized and validated requests; acquired file contents and wrote response with **bufio**
- Enabled end-to-end data transmission via **TCP**; processed pipelined requests; closed connection when required
- Validated good/bad **http** requests; generated statuscode and response headers accordingly; sent requested contents

EXTRACURRICULAR

Leadership Activities
- Head of New Media Team, College of Electrical Engineering, Zhejiang University (Oct. 2018 – Sep. 2019)
- Branch Venue Assistant, 2019 National Doctoral Forum of Electrical Engineering (Jun. 2019)
- Member, Pioneering and Study Instructing Center, Zhejiang University (Sep. 2017 – Jun. 2018)

Honors & Awards
- Honorary Title of Excellent Graduation Project (2020), Inventronics College-set Scholarship (2019), Excellent Social Work Scholarship (Twice, 2017 2019), Outstanding Student Leader Awards (2017), etc.