

Tianshuang Fu

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EDUCATION

University of Pennsylvania, *Philadelphia, PA*

May 2021

Master of Computer and Information Technology & Master of Science in Systems Engineering

- GPA: 3.88/4.0
- Major Courses: Database & Info Systems, Web Development, Computer & Operating Systems, Applied Machine learning, Statistics for Data Science, Optimization & Simulation, Engineering Economics, Macroeconomics

Xi'an JiaoTong University, *Xi'an, Shaanxi, China*

Jun 2018

Bachelor of Engineering in Automation

- GPA: 3.43/4.0 Award: XJTU Siyuan Scholarship
- Major Courses: Data Structures & Algorithms, Computer Networks, Electronic Technology, Data Mining, Intro to AI

SKILLS

- Programming in C/C++, Java, Python, ObjectScript. Database skills of SQL, MySQL, Postgres, and MongoDB.
- Web development: HTML, CSS, JavaScript, TypeScript, Angular/React/Vue, Bootstrap, Tailwind, Node.js, Django...
- Experience of using Git, Perforce, Docker, Kubernetes, MATLAB, Anaconda, AWS, Okta...

EXPERIENCES

Software Development Engineer, *HealthShare - InterSystems*

Jul 2021 - Present

- Developing new features for InterSystems HealthShare Operations. Full-stack projects with Angular and InterSystems IRIS tech stack. Adopting package manager, REST framework, OAuth2 flow, and Docker container-based deployment for HealthShare product suite. Practicing agile development with scrum teams and contributing to company-wide UI library.

Full Stack Developer Intern (Remote), *Fluentkey.com*

Jun 2020 - Sep 2020

- Developed a web application for fluentkey.com, supporting interactive multi-media learning experiences. Technologies used includes Vue.js, Node.js, Express, and MongoDB. Also assisted in SRS docs and API design and implementation.

Software Development Intern, *Cloud & AI Service - Huawei Technologies*

Jun 2019 - Sep 2019

- Implemented Huawei cloud testing services website for users across the company. Completed web UX/UI design, front-end and REST API development for push-notification, user management, and project workspace using Angular. Integrated both NodeJS and Tomcat as server side, with Postman and SwaggerUI setup for API tests.

PROJECTS

Gaze Estimation Algorithm and Optimization, *Institute of Artificial Intelligence and Robotics, XJTU*

- Implemented appearance-based human eye gaze estimation program by introducing correntropy. Practiced image processing, feature extracting and multi-dimension regression. Optimized the algorithm and improved its accuracy by 10% in MATLAB.

Full Stack Web Application Development, *CIS Department at University of Pennsylvania*

- Developed a web application for new college students, providing academic and admission news with faculty/housing/tuition search. Integrated Bing Image Search and Facebook/Google login auth APIs. Deployed and connected several large databases using AWS and mongoose. Also developed an Instagram-like photo sharing networking platform.

PennOS – A UNIX like Operating System, *CIS Department at University of Pennsylvania*

- Designed and implemented a user-level UNIX-like operating system in C. It has a kernel, a shell with process management, virtual memory with mmu, and a file system. The project covers many topics in OS and computer architecture.

Smart Robots and Embedded Systems Application, *XJTU Information-technology Talent Program*

- Implemented pilot and tracking systems for smart race car (Freescale model) based on PID and Fuzzy Logic Control.