# 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, JavaScript. Database knowledge includes SQL, MySQL, Postgres, and MongoDB.
- Web development: HTML, CSS, JavaScript, TypeScript, Bootstrap, Angular/React/Vue, Node.js, Django...
- Other tools: Git, Perforce, MATLAB, Anaconda, AWS, Computer networks...

# **EXPERIENCES**

## **Software Development Engineer,** HealthShare - InterSystems

Jul 2021 - Present

 Developing software and web applications for InterSystems HealthShare operations. Full-stack projects are built on Angular framework and IRIS database with InterSystems ObjectScript. Practicing agile development daily with scrum teams and contributing to company-wide UI framework Angular 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 page UX/UI design, front-end and REST API development for push-notification, user management, and project workspace using Angular 2/7. Used both NodeJS and Tomcat as server side, Postman and SwaggerUI 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.