Chang-Yuan Shih

2410 Shakespeare St. Apt. 077, Houston TX 77030 · 832-713-2465

cyshih@rice.edu · cyshih.me

EDUCATION

Rice University
Houston TX | Dec 2021

Master of Computer Science
GPA: 4.0/4.0 (Current)

National Taiwan University (NTU)
Taipei, Taiwan | Jan 2019

B.S. in Computer Science and Information Engineering (CSIE)
Honor: Presidential Award (Ranked first 2018 Fall) | GPA: Cum - 3.85/4.3, Last 60 - 4.18/4.3

CURRENT PROJECTS

HS Modeled COVID-19 Map | Rice University
Houston TX | Fall 2020 - Now

- Course: COMP554, ELEC 591 Long-Term Project
- Concept proof: Whether Hope-Simpson Epidemic Influenza Model could be applied to COVID-19.
- Technologies used: React.JS, Python, PyTorch, Tableau, Google Data Studio, PostgreSQL

Full-Stack Web App | Rice University
Houston TX | Fall 2020

- Course: COMP531 Web Development
- Develop a MERN based multi-user Facebook-liked web app on Surge/Heroku.
- Technologies used: MERN (MongoDB, Express, React.JS, Node.js), Redis, Redux, Jest/Enzyme...

WORKING EXPERIENCE

Ruby|Python

Beyond Media Global | Technology Intern
Taipei, Taiwan | Nov 2018 - Jun 2019

- Cut clients' weekly reports processing time by more than **90%** by implementing the full-stack of **Adeqo** - a Ruby on Rails, Python, PostgreSQL based SEO data retrieval and analysis platform.
- Rewrote the E-newsletter for DiscoverHongKong to a responsive mobile-friendly version.
- Client websites maintenance. IT support.

C|C++|Python

Academia Sinica | Research Assistant
Taipei, Taiwan | Apr 2018 - Jul 2020

(Internship: Apr 2018 - Jun 2019, Full-time Assistant: Jan 2020 - Jul 2020)

EMCLab, Research Center for Information Technology Innovation, Prof. Pi-Cheng Hsiu
- Distributed deep learning: DLaaS - Designed **60%** experiments for DDL strategies (ex. Synchronous Ring/Parameter-Server/Round-Robin) with vanilla Tensorflow and Uber's Horovod on AWS/GCP.
- Embedded DL: **Real-time** performance SSR-Net (Age estimation network) on Nvidia TX2.
- Intermittent DL: New convolution strategies for intermittent IoT devices (with TI MSP430/432).

Python|C|sh

NTU CSIE WM Team | Team Lead
Taipei, Taiwan | Sep 2017 - Jun 2019

The WM (Workstation Management) Team maintains and refines the Arch/Ubuntu/BSD workstations that serve more than a thousand members of our department.
- Made server deployments (ex. package installation, make commands, or edit system files) **more than 15x faster** by constructing a Puppet server master to achieve automated deployment.
- Front-end of the new HTML5 responsive server monitor. Replaced the crude old one.
- Server maintenance: built AUR, set up new servers, modified Linux commands such as LPR, etc.

C++

Teaching Assistant | NTU CSIE
Taipei, Taiwan | Feb 2018 - Jun 2018

Designed homework and projects, graded tests, TA hours for course Data Structures and Algorithms

SKILLS

C • C++ • Python • Ruby • Ruby on Rails • HTML/CSS • JavaScript • ReactJS • SQL • Shell Script • Java