# Chang-Yuan Shih

Seattle, WA • 206-876-1503 cyshih73@gmail.com • cyshih.me

#### **EDUCATION**

## **Rice University**

Houston, TX | Sep. 2020 - Dec 2021

Master of Computer Science

- GPA: 3.95/4.0
- Highlighted courses: Web Development & Design Parallel Computing Database System Implementation • Object-Oriented Programming & Design

#### **National Taiwan University**

Taipei, Taiwan | Sep 2015 – Jan 2019

B.S. in Computer Science and Information Engineering

- GPA: 3.85/4.3; Last 60 4.18/4.3
- Honor: Presidential Award (Ranked first 2018 Fall: 4.3/4.3)
- Teaching Assistant for course Data Structures and Algorithms
- Managed CSIE department's workstations that serves thousands of students and faculties

### **EXPERIENCE**

### **Google LLC | Software Engineer**

Seattle, WA | Mar 2022 - Now

Google Cloud, Virtual Machine Memory Management Team

## **Samsung SARC | Software Engineer Intern**

Austin, TX | May 2021 - Aug 2021

- Project: GPU Compiler Fuzz Testing <u>Automated the testing of GPU compiler</u> by creating a toolkit
  working with my customized version of <u>open-source tool GraphicsFuzz</u>. Effortlessly generates fuzzed
  test inputs, runs the tests, and <u>reduces the erroneous fuzzed input</u> for easy error identification
- Helped the team to identify errors for the compiler on the new Samsung Exynos mobile chipset.

## Academia Sinica | Research Assistant | Research Intern

Taipei, Taiwan | Jan 2020 - Jul 2020 | Apr 2018 - Jun 2019

EMCLab, Research Center for Information Technology Innovation, Prof. Pi-Cheng Hsiu

- Distributed deep learning (DDL): Experiments for DDL strategies (ex. Synchronous Ring/Parameter-Server) for our new DDL platform framework with <u>TensorFlow on AWS/GCP</u>. Found and optimized the <u>communication bottleneck</u> for the DDL framework, which lowers the <u>latency by 30% to 60%</u>.
- Embedded DL: Real-time Keras-based SSR-Net (Age estimation network) on ARM-based device
- Intermittent DL: New convolution strategy concept for intermittent IoT devices

## **Beyond Media Global | Technology Intern**

Taipei, Taiwan | Nov 2018 - Jun 2019

- Project: Adeqo <u>Automated clients' weekly report processing</u> by developed the <u>full-stack</u> of a Ruby on Rails, Python, PostgreSQL, Google Data Studio based SEO data retrieval and analysis platform
- Full-stack development for clients' website, IT support

#### Freelancer | Full-Stack Web Developer

Remote | Dec 2019 - Mar 2022

- Clients' website design and development on a piecework basis; server and website maintenance
- Clients: Soar Cloud HR Solutions ShangKai Steel Lohas Glasses and more

#### The LanYang Ballet | Principal Dancer

Taipei, Taiwan | Jul 2008 - Aug 2020

- Fifth place in international ballet competition "Taiwan Grand Prix, 2013" among other professionals
- Practiced ballet since kindergarten and kept performed on stage annually since 2005

### **LANGUAGES**

C • C++ • Python • Java • HTML/CSS • JavaScript • React JS • SQL • Golang • Ruby/RoR