CHENYU NIU

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EDUCATION

University of Wisconsin-Madison　　　　　　Madison, WI. (September 2020 - December 2022)
B.S Computer Science, Mathematics Minor　　　　　　　　　　　*Cumulative GPA: 3.70*

Edmonds College　　　　　　　　　　Seattle, WA. (September 2017 - June 2020)
A.S Computer Science　　　　　　　　　　　　　　　　　*Cumulative GPA: 3.82*

TECHNICAL SKILLS

Programming Skills	Java, C/C++, Python, JavaScript, HTML, CSS, Unix/Linux, GCP, LaTeX
Software	Android Studio, Intellij IDEA, Visual Studio, VS Code, Vim, NetBeans
Languages	Chinese (Mandarin), English
Course Highlight	Operating Systems, Computer Networks, Linear Optimization

PROJECTS

Piggy Bank Android App　　　　　　　　　　　　　　　　April 2020
Back-end & Front-end developer

- Track user's income and expense with categories, display data in RecyclerView and a pie chart
- Cloud storage individual's user data using Google FireBase firestore
- Real-time synchronize between multiple devices

Cryptocurrency and Stock Portfolio Website　　　　　　　　　December 2020
Back-end developer

- A website that displays a user's trading record to others
- Implemented with Apache HTTP server, CSS, Java, and JavaScript

Parallel Run-length encoding Data Compression Algorithm　　　　November 2021

- Multi-threading implementation of RLE compression algorithm
- Scored top 20% performance in Operating System course performance test

EXPERIENCE

Math Club　　　　　　　　　　　　　　January 2019 - June 2020
President　　　　　　　　　　　　　　　　　　　*Seattle, WA.*

- Organizing events and creating the club website. Offering volunteering opportunities during Western Washington University Math Conference. Holding preparation section of AMATYC Student Math Competition as well as Integration Bee.

One Hour Project Club　　　　　　　　　　　June 2018 - June 2020
English Tutor　　　　　　　　　　　　　　　　　　*Seattle, WA.*

- Teach online English classes to students from rural areas of China and mainly teach students speaking using English.

Google Developer Student Club　　　　　　　　　Feb 2021 - Present
Member　　　　　　　　　　　　　　　　　　　*Madison, WI.*

- Google Developer Student Clubs at UW-Madison is a campus organization led by the University of Wisconsin-Madison students and supported by Google Developers.

RESEARCH PAPERS

Analysis of Locks and Sleep/WakeUp Routine in XV6 Operating System Nov 2021

– Analysis of how ptable.lock and ftable.lock is used in XV6 operating system source code as well as how XV6 schedule a process to sleep and then wake up.

Estimation of π Using Binomial Theorem May 2021

– Demonstrate how Isaac Newton was able to generalized binomial theorem and use it to largely improved the difficulty and accuracy of π estimation.