

Rui Pan

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EDUCATION

UW-MADISON

BS IN COMPUTER

SCIENCES + APPLIED MATH

Madison, WI, USA

Sep 2018 - Dec 2021 (Expected)

GPA: 3.97 / 4.00

LINKS

GitHub:// [ruipeterpan](#)

LinkedIn:// [Rui \(Peter\) Pan](#)

Facebook:// [Rui \(Peter\) Pan](#)

COURSEWORK

GRADUATE (TAKEN AS UGRAD)

Advanced Operating Systems

High Performance Computing (I/P)

UNDERGRADUATE

Algorithms

Artificial Intelligence

Bioinformatics

Computer Architecture

Computing Theory

Computer Vision

Database Systems

Data Analysis

Networks (I/P)

Operating Systems

Theory of Computing

Calculus

Combinatorics

Discrete Math

Numerical Linear Algebra

Probability

COURSERA

Big Data Systems (I/P)

Deep Learning

Software Engineering

Front-end Web Design

Back-end Web Applications

Cryptography

SKILLS

Proficient:

Python • Java • C • C# • HTML/CSS

Familiar:

R • Javascript • Docker • PyTorch •

PostgreSQL

Some exposure:

Apache Spark • C++

ACADEMIC FOCUS

I am broadly interested in everything system-ish (Machine Learning Systems, Operating Systems, Cloud Computing, Networks). For now, I am working on building systems for large-scale distributed machine learning. In the future, I might work on some projects in OS, Security, or even Soccer Analytics.

RESEARCH

UNDERGRADUATE RESEARCH ASSISTANT | UW-MADISON

COMPUTER SCIENCES DEPARTMENT

May 2020 – Present | Advisor: Prof. Shivaram Venkataraman

- Working on the large-scale implementation of a generic high-level scheduling framework for distributed machine learning jobs in computing clusters
- Adapted the scheduling framework to support fast worker migration during preemption, various communication architectures (parameter server/all_reduce), different scheduling granularity (gang/fine-grained scheduling), and multiple test-bed environments (Microsoft Azure, CloudLab)

UNDERGRADUATE RESEARCH ASSISTANT | WISCONSIN INSTITUTE FOR DISCOVERY

Jan 2020 – Present | Advisors: Dr. Steven Wangen & Prof. Michael Ferris

- Worked on the Dairy Brain project, an analytics platform for evaluating and predicting the performance of dairy cows by aggregating large quantities of dairy data
- Developed, deployed and maintained the Agricultural Data Hub (AgDH), a warehouse-scale computing infrastructure for the collection, storage, homogenization, and distribution of dairy farm's data in a series of PostgreSQL data marts
- Hosted poster sessions at the 3rd WID Research Symposium and presented in outreach meetings for the local dairy industry

EXPERIENCE

TUTOR IN COMPUTER SCIENCES AND MATH | UNDERGRADUATE LEARNING CENTER

Sep 2019 – May 2020 | Madison, WI

Offered drop-in and by-appointment tutoring sessions for core undergraduate computer sciences and math courses to individual or small groups of engineering students to improve academic performance.

SUBTITLE TRANSLATOR | COURSERA

May 2019 – May 2020 | Remote

Translated English subtitles to Simplified Chinese subtitles in multiple popular computer sciences courses.

STUDENT INSTRUCTOR | RDC@HSASJTU

Sep 2017 – May 2018 | Shanghai, China

Designed an introductory computer sciences course about programming basics.

Gave lectures on AP Computer Science A and Intro to Data Analysis to 10+ students.

Last updated: Jan 2021