

WEIJUN HUANG

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EDUCATION

Technical University of Denmark

Master of Human-centered Artificial Intelligence

Lyngby, Denmark

Sep 2021 - Present

Xi'an University of Architecture and Technology

Bachelor of Urban and Rural Planning (top 10%)

Xi'an, China

July 2015 - Jul 2020

WORK EXPERIENCE

Google Summer of Code 2022 participant with MariaDB

Open Source Developer

Remote

May 2022 - Present

- Implemented regression functions based on Youngs-Cramer algorithm
- Implemented and improved JSON_DETAIL function to better suit development and debugging purposes

Urbanspace Planning and Architectural Design Co.,Ltd.(Beijing)

Research Assistant

Beijing, China

Jul 2018 - Sep 2018

- Participated in the study of the Beijing-Tianjin-Hebei metropolitan area and used python to automatically collect and process preliminary data

RESEARCH EXPERIENCE

Quantitative Analysis of Urban Street Color (Python)

Model Constructor

Xi'an, China

Jul 2018 - Oct 2018

- Used street view and photos to conduct a detailed survey of characteristic blocks in Xi'an city
- Used *K-means cluster* analysis to *extract the theme colors* of the city and analyzed the different theme colors

Landscape Evaluation System Embedded in Web Applications (Python)

Model Constructor

Xi'an, China

Apr 2018 - Aug 2018

- Implemented an *landscape evaluation system* in the early stage and online website deployment
- Used machine learning to *build automated analysis processes*

PERSONAL PROJECTS

RookieDB (Java)

- Designed a *bare-bones database implementation* which supports executing simple transactions in series
- Constructed *B+ tree indices*, efficient join algorithms, query optimization, multigranularity locking to allow concurrent execution of transactions, and database recovery

Bear Map (Java)

- Worked on the backend of a *web mapping application* in the town of Berkeley
- Achieved the complete rastering and completed *A* algorithm* to find the *shortest path*

Modifications to the xv6 Operating System (C)

- Built a modified version of MIT's xv6 Operating System, which adds several new *scheduling algorithms*, *copy-on-write*, and *lazy allocation page*, symbolic links, mmap, along with a couple of system calls

Sponge (C++)

- Created TCPReceiver to translates between incoming *TCP* segments and the incoming byte stream
- Implemented TCPSender to translate from an outgoing byte stream to segments that will become the payloads of unreliable datagrams

SKILLS

Programming:

Java, C, C++, C#, Python, Go, Shell, Javascript, SQL, LaTeX, HTML, CSS

Software & Tools:

Linux, Git, GDB, CUDA, MPI, OpenMP, Adobe Creative Cloud (Photoshop, Illustrator)

Language:

Fluent in Chinese and English