Mingcheng Hu

yuukias@unc.edu • (734) 596-5685 • https://yuukias.github.io/ • Chapel Hill, NC, 27514

EDUCATION

University of North Carolina at Chapel Hill   **Chapel Hill, NC**
Master of Science in Biostatistics   *Aug. 2023 – May. 2025(Expected)*

Shanghai Jiao Tong University - Joint Institute   **Shanghai, China**
Bachelor of Science in Electrical and Computer Engineering   *Sep. 2019 – Aug. 2023*
GPA: 3.63 / 4.00

University of Michigan   **Ann Arbor, MI**
Bachelor of Science and Engineering in Data Science   *Aug. 2021 – May. 2023*
GPA: 3.94 / 4.00
Selected Coursework:
Machine Learning, Web Systems, Database Management, Real Analysis, Bayesian Inference, Nonparametric Statistics

PROJECT EXPERIENCE

R10K Superscalar Processor / ECE4700J Computer Architecture   **Shanghai, China**
Student   *Summer 2023*
- Construct a 2-way superscalar processor that allows register aliasing and has 7 functional units.
- Implement issue logic and execution stage of instructions based on single input/output memory unit.

Decaf Compiler / EECS483 Compiler Construction   **Ann Arbor, MI**
Student   *Winter 2022*
- Implement lexical analysis using flex and regex.
- Perform syntax analysis on generated tokens using yacc and C++.
- Generate MIPS code as backend and allocate registers via Chaitin's algorithm

Insta485 / EECS485 Web Systems   **Ann Arbor, MI**
Student   *Winter 2022*
- Develop a feed of posts application, incorporating Bootstrap as style and React as building blocks.
- Handle the REST API using Jinja and Flask for back-end and manage the database using SQLite.
- Build a MapReduce structure using Python and incorporate it into a search engine.

RESEARCH EXPERIENCE

Virtual Hospital / Statistics Online Computational Resource (SOCR)   **Ann Arbor, MI**
Member   *Feb. 2022 – April. 2023*
- Build a RShiny application based on shinyDashboard that can hold different functionalities such as UMAP.
- Package the application into a portable version through Electron.

PROFESSIONAL EXPERIENCE

Frontend Developer / GBCS Group   **Calgary, Canada**
Intern   *May. 2022 – Aug.2023*
- Maintain client and vendor side of Aukai and Orion using React hooks, PrimeReact, and other JavaScript libraries.
- Adopt Next.js, Mantine, Jotai and Sass to revamp the landing pages of GBCS groups.
- Attend regular sprint meeting, troubleshoot and provide feedbacks for UI/UX design team.

SKILLS

Language: R, Python, JavaScript, C++, Verilog, Java, SQL, Mathematica, Latex, SAS

TEACHING EXPERIENCE AND ACTIVITIES

Teaching Assistant, ECE4700J Numerical Analysis, Shanghai Jiao Tong University   *2023*
Grader, EECS370 Intro to Computer Organization, University of Michigan   *2022*