

# YUKAI YAN

206-605-8826

yukaiky@uw.edu

<https://yukaiyan.com/>

## EDUCATION

**UNDERGRADUATE:** UNIVERSITY OF WASHINGTON

**EXPECTED GRADUATION: DECEMBER 2021**

Major: Computer Science & Applied Computational Mathematical Science

UW Honors Program Awards: Dean's list Cumulative GPA: 3.79/4.00

Technology and Business Association Leader (Registered Student Organization at UW)

## SKILL SET

- Languages: Java(Proficient), Python, C/C++, MATLAB, JavaScript, SQL.
- Applications: Git, Django, React, Spark, Sklearn, Selenium, BeautifulSoup, Overleaf, IntelliJ, VSCode.
- Developer Skills: Data Structures and Algorithms, Object-Oriented Programming, System Programming, Web Crawling and Processing, Compiler, Machine Learning, Linux, Data Analysis and Visualization.

## RELEVANT EXPERIENCE

**INTERNSHIP:** SOFTWARE DEVELOPMENT INTERN

**JUNE 2021 – SEPTEMBER 2021**

- Full-time SDE intern on the data science team at 98point6.
- Analyzed the existing neural network with past-year data, designed various models that could improve the performance, tuned the hyperparameters and trained/compared multiple models.
- Implemented the design, conducted sniff tests, and deployed a better model into production.
- *Technologies: Python, PyTorch, Sklearn, NumPy, SQL, Sagemaker, Jenkins, GitHub, Slack, VSCode.*

**LEADERSHIP:** TEACHING ASSISTANT

**JANUARY 2021 – JUNE 2021**

- Part-time TA at Paul G. Allen School for CSE 312: Probability & Statistics for Computer Scientists and CSE 401/M501: Compiler Construction.
- Led weekly review sessions, held office hours, prepared and graded assignments/exams.

**PROJECT EXPERIENCE:** COMPILER CONSTRUCTION

**SEPTEMBER 2020 – DECEMBER 2020**

- Developed a system that compiles and executes MiniJava programs.
- Implemented scanner, parser, AST, semantic analysis, code generation, and optimization to the compiler.
- Designed the main executable program that handles command-line arguments for various tasks.
- *Technologies: Java, Apache Ant, C, x86 Assembly Language, IntelliJ, GitLab.*

**PROJECT EXPERIENCE:** SOFTWARE DESIGN AND IMPLEMENTATION

**JUNE 2019 – AUGUST 2019**

- Built a Graphic User Interface that displays the shortest path between buildings on the map of campus.
- Designed the underlying ADT to properly save and represent the data about the map from scratch.
- Implemented the specification and Implementation tests to analyze and improve the code.
- *Technologies: Java, Spark, React, JavaScript, Html, IntelliJ, GitLab.*

## RESEARCH

**RESEARCH ASSISTANT:** FATE

**SEPTEMBER 2019 – FEBRUARY 2020**

- Research Topic: Fair, Accuracy, Transparency, and Equality in search engines.
- Built an online questionnaire and implemented the backend to process frontend requests and send data.
- Designed the UI and the communication to the database at the frontend ([sample page](#)).
- *Technologies: Python, Django, Html, JavaScript, VSCode, GitHub.*