

EDUCATION

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| Aug. 2020 – May 2024 | B.S. in Computer Engineering GPA: 4.00 / 4.00 | UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN (UIUC) |
| Sept. 2020 – June 2024 | B.Eng. in Electronic and Computer Engineering GPA: 3.97 / 4.00 | ZHEJIANG UNIVERSITY (ZJU) |

PUBLICATIONS

CONFERENCE AND JOURNAL PUBLICATIONS

1. **Synthesizing Precise Static Analyzers for Automatic Differentiation.**
Jacob Laurel, **Siyuan Brant Qian**, Gagandeep Singh, Sasa Misailovic.
In *38th ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages and Applications (OOPSLA 2023)*, Cascais, Portugal, October 2023.

WORKSHOP PUBLICATIONS

2. **Abstract Interpretation for Automatic Differentiation.**
Jacob Laurel, **Siyuan Brant Qian**, Gagandeep Singh, Sasa Misailovic.
In *10th Workshop on Languages for Inference at POPL 2024 (LAFI 2024)*, London, UK, January 2024.

RESEARCH EXPERIENCE

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| Jan. 2023 – Present | Undergraduate Research Assistant Advised by Prof. Sasa Misailovic and Prof. Gagandeep Singh. <ul style="list-style-type: none">• Worked with Jacob Laurel, Prof. Gagandeep Singh, and Prof. Sasa Misailovic on Static Analysis of Differentiable Programs.• Helped develop PASADO, a technique for synthesizing precise static analyzers for Automatic Differentiation. Helped with PASADO implementation, evaluated PASADO on multiple benchmarks to show its precision, generality, and scalability. Coauthored on 1 and 2. | UIUC ARC GROUP & FOCAL LAB |
| Sept. 2021 – June 2022 | Undergraduate Research Assistant Advised by Prof. Hongwei Wang. <ul style="list-style-type: none">• Worked on Natural Language Processing, with a focus on Relation Extraction. | ZJU |
| June 2021 – Aug. 2021 | Undergraduate Research Assistant Advised by Prof. Wenxi Yao. <ul style="list-style-type: none">• Deployed Linux on a customized fully programmable system-on-chip, which is the core of a control system of high power medium voltage converters. | ZJU |

HONORS & AWARDS

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| Fall 2022 | Dean's List | UIUC |
| Fall 2022 | Ranked #2 in ECE 391 Operating System Design Competition | UIUC |
| Fall 2020 – Spring 2023 | Departmental Scholarship (CNY 10000) × 3 | ZJU |
| Fall 2020 – Spring 2022 | Dean's List × 2 | ZJU |

TEACHING EXPERIENCE

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| Fall 2023 | Teaching Assistant for UIUC ECE 220 (Computer Systems & Programming, ZJUI Section) | ZJU |
| Spring 2023 | Course Assistant for UIUC ECE 391 (Computer Systems Engineering) | UIUC |
| Spring 2023 | Grader for UIUC ECE 210 (Analog Signal Processing) | UIUC |

SKILLS

Programming Languages: (CUDA) C++, C, Rust, Python, OCaml, SQL, x86 assembly
RISC-V assembly, MATLAB, Java, Javascript, CSS, HTML, R

Packages & Tools: Docker, Git, SVN, MySQL, MongoDB, Neo4j, PyTorch, Pandas
Numpy, scikit-learn