

SAMODYA ABEYSIRIWARDANE

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WORK

- | | | |
|---|-------------------------------------|-------------------------|
| Test Engineer I | Jabil Circuit , San Jose, CA | Spring 2019 - Present |
| <input type="checkbox"/> Design and develop a tab completer framework for the Python REPL to use in building completers that improve technicians' debug workflow and operator on-boarding process | | |
| <input type="checkbox"/> Build a Continuous Delivery pipeline for internal tools to get faster iterations | | |
| <input type="checkbox"/> Training in <i>Design For Testing</i> for electronics mass manufacturing | | |
| Test Engineering Intern | Jabil Circuit , San Jose, CA | Summer 2018 |
| <input type="checkbox"/> End to end development of a tool for live analysis of internal test and debugging data | | |
| <input type="checkbox"/> Design and develop a failure resistant <i>testcell grid</i> data aggregator, backend and a simple frontend | | |
| <input type="checkbox"/> For high impact in workcell efficiency, selected for competition: <i>Jabil - Design Best Practices</i> (ongoing) | | |
| <input type="checkbox"/> <i>Experience with:</i> Golang, Python, MySQL, JS/React | | |
| Graduate Research Assistant | Computer Science, Purdue | Spring 2017–Spring 2018 |
| <input type="checkbox"/> <i>Worked on:</i> 3-way merging data structures research project | | |
| <input type="checkbox"/> <i>Workshop paper:</i> Mergeable Types, ML Workshop, 2017 | | |
| <input type="checkbox"/> <i>Experience with:</i> OCaml, Git internals, Database Consistency | | |
| Teaching Assistant | Computer Engineering, Purdue | Spring 2015 |
| <input type="checkbox"/> <i>Course:</i> Computer Design and Prototyping (ECE437) | | |
| <input type="checkbox"/> Assist students in benchmarking, analyzing performance and taking design decisions to develop a multicore pipelined MIPS processor | | |
| <input type="checkbox"/> <i>Experience with:</i> Verilog, Python, Logic synthesis targeting FPGA | | |
| Student Software Developer | Krannert Computing, Purdue | Summer 2012–Fall 2016 |
| <input type="checkbox"/> <i>Worked with a team on:</i> Backend and frontend for web and desktop applications | | |
| <input type="checkbox"/> CV Parser, Job Queue, Calendar Application, Course Content aggregator. ... | | |
| <input type="checkbox"/> Mentor new students on coding standards, best practices and version control | | |
| <input type="checkbox"/> <i>Experience with:</i> C#, MSSQL, Regex, XML/XSLT, HTML/CSS/JS, MVC, TFS | | |

EDUCATION

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| MSc Computer Science | Purdue , West Lafayette, IN | Spring 2016–Fall 2018 |
| <input type="checkbox"/> <i>Courses:</i> Distributed systems, Advanced database systems (Relational and non-relational), Programming Language Theory, Algorithm design and analysis | | |
| BSc Computer Engineering | Purdue , West Lafayette, IN | Fall 2011–Spring 2015 |
| <input type="checkbox"/> <i>Courses:</i> Circuit analysis, Computer design and prototyping, Signals and systems, Data structures and algorithms, Discrete Mathematics, Advanced C, Intro to AI, Intro to Infosec, Compilers, Operating Systems | | |

NOTABLE PROJECTS

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| Mergeable Types <i>ocaml</i> | https://github.com/sransara/mtypes-lib |
| <input type="checkbox"/> Extend Okasaki's Purely functional data structures with 3-way merge operations | |
| Distributed Key-Value Store <i>java</i> | https://github.com/sransara/kvs-transactions |
| <input type="checkbox"/> Key level granular multi key transactions, 2PL/2PC concurrency control, Strong consistency | |
| Micro Language Compiler <i>java</i> | https://github.com/sransara/microbe-lang |
| <input type="checkbox"/> Implement Register allocation, IR generation, Control flow graph analysis and a VM to run the serialized IR | |
| Multicore MIPS processor <i>verilog</i> | https://github.com/sransara/aww-processor |
| <input type="checkbox"/> Develop a multicore processor for MIPS instruction set architecture optimized for synthesis | |

OTHER

- ☐ Recognized in hall of fame as reward recipient for disclosure of XSS bugs in Gmail: 2012 July, 2012 October
- ☐ Awarded bronze medal at International Junior science olimpiad, Baku, Azerbaijan: 2009