

SAMODYA ABEYSIRIWARDANE

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WORK

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|---|-------------------------------------|-------------------------|
| Test Engineering Intern | Jabil Circuit , San Jose, CA | May 2018–August 2018 |
| <input type="checkbox"/> <i>Worked on:</i> 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, the database and the frontend | | |
| <input type="checkbox"/> <i>Experience with:</i> Golang, Python, MySQL, ReactJS | | |
| 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 | | |
| 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, Complex Regex, XSLT, HTML/CSS/JS, MVC, TFS | | |
| Undergrad 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, taking educated design decisions to develop a Multicore pipelined MIPS processor | | |
| <input type="checkbox"/> <i>Experience with:</i> Verilog, Python, FPGA programming | | |

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> Data structures and algorithms, Discrete Mathematics, Advanced C, Intro to AI, Intro to Infosec, Compilers, Operating Systems, Circuit analysis, Computer design and prototyping | | |

NOTABLE PROJECTS

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|--|---|
| Mergeable Types <i>ocaml</i> | https://github.com/sransara/mtypes-lib |
| <input type="checkbox"/> Develop an AST transformer using OCaml PPX | |
| <input type="checkbox"/> Extend Okasaki's Purely functional data structures with 3-way merge operation | |
| Distributed Key-Value Store <i>java</i> | https://github.com/sransara/kvs-transactions |
| <input type="checkbox"/> Implement a key-value store with key level granular 2PL based transaction support | |
| <input type="checkbox"/> Paxos replicated log based sharding support | |
| Micro Language Compiler <i>java</i> | https://github.com/sransara/microbe-lang |
| <input type="checkbox"/> Build an extensible compiler for a given language grammar | |
| <input type="checkbox"/> Implement Register allocation, IR generation, Control flow graph analysis | |
| Multicore MIPS processor <i>verilog</i> | https://github.com/sransara/aww-processor |
| <input type="checkbox"/> Develop a multicore processor for MIPS instruction set architecture | |
| <input type="checkbox"/> Optimized and tested the synthesized design on FPGA | |

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