Nicholas Baron

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Education

University of California, Irvine Doctorate in Computer Science California State Polytechnic University, Pomona Master's of Science in Computer Science Thesis: Observer Rules for Box-Split Grammars California State Polytechnic University, Pomona Bachelor of Science in Computer Science (GPA: 3.8)

Conference Papers

Baron, N., Eger, M. "Observer Rules for Box-Split Grammars" *AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE-23)* Salt Lake City, United States.

Work Experience

Compiler Intern, Xilinx/AMD, CA

- Developed and tested libXAIE to AirBin pipeline
- Contribute AirBin lowering to MLIR-AIE

Compiler Intern, Wind River Systems, CA

- Shipped an updated version of Rust for VxWorks
- Ported an open-source implementation of UbSan for the Diab7 compiler

Software Engineering Intern, Murcal, Inc., Palmdale, CA

- Developed and documented a framework that will be used on future embedded systems
- Created and designed multi-threaded features from feedback given by team members
- Worked in a semi-independent development role to iterate on the project

Extracurricular Projects

little-lang

- Used third-party tools to assist in building and generating code for the project
- Researched compiler concepts related to the project, improving the code from said research
- Improved project specification after project had begun, adding comprehensibility
- Documented accepted language with example code and used examples for testing

Prime_Finder_2

- Developed models to better understand parallel processing concepts
- Implemented a safe multithreading model for scalability
- Optimized multithreaded code to improve perceived performance

Technical Skills

- C++
- Rust
- Haskell
- Java

- Python Linux
- Shell Script
- Shell Scripting
- make, CMake

- git / GitHub, Bitbucket
- LATEX
- Assembly

June—December 2021

May—August 2022

Expected Completion May 2028

Completed December 2022

Completed December 2020

May—August 2019

Fall 2019

Spring 2019