# Nicholas Baron

US and EU Citizen | +1 (949) 237–2484 | nicholas.baron.ten@gmail.com
https://github.com/Nicholas-Baron | https://nicholas-baron.github.io
https://www.linkedin.com/in/Nicholas-Baron-Ten

## Education

| | |
|---|---|
| **University of California, Irvine** | Expected Completion May 2028 |

Doctorate in Computer Science

| | |
|---|---|
| **California State Polytechnic University, Pomona** | Completed December 2022 |

Master's of Science in Computer Science (GPA: 3.97)
Thesis: *Observer Rules for Box-Split Grammars*

| | |
|---|---|
| **California State Polytechnic University, Pomona** | Completed December 2020 |

Bachelor of Science in Computer Science (GPA: 3.86)

## 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**, AMD, Santa Clara, CA | June—September 2025 |

- Explored performance issues in AI accelerators
- Contributed to LLVM AMDGPU backend

| | |
|---|---|
| **Compiler Intern**, Xilinx/AMD, CA | May—August 2022 |

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

| | |
|---|---|
| **Compiler Intern**, Wind River Systems, CA | June—December 2021 |

- 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 | May—August 2019 |

- 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** | Fall 2019 |

- Used Flex, Bison, and LLVM to assist in generating parser code and assembly
- 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

## Technical Skills

- C++
- Rust
- Haskell
- Java
- Python
- Linux
- Shell Scripting
- LLVM
- Build Systems (CMake)
- git / GitHub, Bitbucket
- LaTeX
- Assembly