

# Andrew D'Angelo

**Email:** ardange2@illinois.edu

**Phone:** +1 (847) 906-3448

**Work Authorization:** U.S. Citizen

**Web:** <http://andrew.uni.cx>

**GitHub:** <https://github.com/ardangelo>

## SUMMARY

Enthusiastic and creative developer with a strong mathematical background and experience designing and writing computer software. Able to design architectures and algorithms at a high level then implement in a lower level in a multitude of languages and frameworks.

## EDUCATION

**University of Illinois at Urbana-Champaign** May 2018  
Bachelor of Science in Computer Science, Engineering. GPA: 3.9/4.0  
Co-Chair of UIUC chapter of ACM Special Interest Group on Programming Languages. Member of the Tau Beta Pi Engineering Honor Society.

**University of Washington at Seattle** Sep. 2014–Dec. 2015  
Dean's List 2014 - 2015. Transferred to U. of Illinois at Urbana-Champaign in Dec. 2015. GPA: 3.8/4.0

## WORK EXPERIENCE

**Cray Inc.**, Bloomington, MN June 2018–Present  
Software Developer II, Programming Environments: Debuggers

**Cray Inc.**, Bloomington, MN Summer 2017  
Software Development Intern, Programming Environments: Debuggers  

- Refined and redesigned a distributed memory-leak checker, transforming a proof-of-concept project into a performant and feature-rich software tool.
- My redesign was very well received during an internal pilot phase. Learned how to develop for and interface with massively-parallel systems and improved C++, systems, and network programming skills in a professional development setting.
- Created a suite of modifications to GDB for a parallel debugger product. Replaced a text-based converter for an internal data interchange format with direct generation from GDB data structures.

**Quicket Solutions**, Champaign, IL Feb. 2016–May 2017  
Software Developer Summer 2015 & 2016  
Software Development Intern  

- Wrote and maintained database interface, backend management, and user-facing communications code as part of a complete electronic police citation management service using Python and Web2Py.
- Designed and implemented a software solution to replace a traditionally paper-based process in a tight-knit, collaborative group. Created extensible, robust systems for data collection, processing, and analytics in a fast-moving startup environment.

## SELECTED INDEPENDENT PROJECTS

**scheme→gba: Scheme to ARM Assembly Compiler** Summer 2016  
From-scratch Scheme compiler targeting ARM assembly along with a bootstrapping and communications toolkit for running code on real Game Boy Advance hardware.

**Neural.NET: Machine Learning Library** Summer 2015  
Machine learning library for .NET written in F#. Exposes a simple interface for training a model using gradient descent. Includes a sample Windows Phone application for recognizing handwritten numerals.

## TECHNICAL SKILLS

C++ (11 & 17), C (embedded & systems), Python with Web2Py, C# and F# for the .NET framework, Haskell, LISP, Java. Current focus on compilers, debuggers, systems programming, and embedded C++17.