# ANNIE CHERKAEV

anniecherkaev.com
bitbucket.com/anniecherk
github.com/anniecherk



## **EDUCATION**

2016 - present

PhD Student in CS

University of Utah *GPA: 4.0/4.0* 

2011 - 2015

**B.S. University of Utah** 

Major: Mathematics Minor: Computer Science GPA: 3.9/4.0

Summer 2016

**Recurse Center** 

Self-directed programming retreat

## COURSEWORK

Distributed Systems & OS
Compilers & Advanced Compilers
Programming Languages
Machine Learning & Al
Deep Learning Seminar
Functional Programming Studio
Advanced Algorithms
Advanced Architecture

## **LANGUAGES**

Python, Haskell, Racket, Go C++, C, Scala, C#, Java, Bash

# CONTACT

annie.cherk@gmail.com

## **OPEN SOURCE PATCHES**

#### CVE-2017-12762

Found and patched a potential buffer overflow in an ISDN driver in the linux kernel. (Shared with Jiten Thakkar)

#### GHC Bugfix #12117

Fixed a small bug in the Haskell compiler where incorrect variable shadowing produced incorrect error messages.

## RESEARCH PROJECTS

#### **DSL for Psychology Experiments**

- A "SAT-sampler aided" domain specific language which
- 1. Provides an interface for expressing constraints about the ordering of a sequence, and
- 2. Finds a sequence that satisfies the constraints with the guarantee that all satisfying solutions are uniformly probable.

#### **Low Precision Machine Learning**

Investigating the effects of precision & numeric representation on properties of SGD such as classification accuracy and convergence speed for dataset with different characteristics.

## **WORK EXPERIENCE**

Summer 2014

#### Software Development Intern, Delcam, SLC, Utah

Developed a wizard for designing custom gears and a macro that got included in 'What's New' for FeatureCAM 2015 (a CAD/CAM tool), among other feature requests and bug fixes. (C++)

Other

#### **Research Assistant:**

Visualization, Astronomy, Matrix Analysis

#### **Teaching Assistant:**

Machine Learning, Intro to Object Oriented Programming