Karl Cronburg

CONTACT INFORMATION	Computer Science Department Tufts University 161 College Avenue Medford, MA 02155	857.206.1330 karl@cs.tufts.edu Tufts: https://www.eecs.tufts.edu/ karl/ Github: cronburg Citizenship: United States

DEGREES

2015   M.S. in Computer Science, Tufts University
2013   B.S. in Physics & Computer Science, Bucknell University

RESEARCH INTERESTS

Debugging, systems verification, memory management

LANGUAGES

Python: Primarily used for scripting in recent years (grad school). Used for astronomical data analysis in undergrad (numpy, scipy, matplotlib, pylab, etc.).

C: Used heavily in research and coursework.

Haskell: Used heavily in research and coursework.

Java: Used moderately in research and coursework; more knowledgeable about the language itself and JVM implementations than its applications.

LaTeX: Conference papers, presentations, classwork.

Limited exposure to: Bash, Ruby, C++, ML, Smalltalk, Lisp, μscheme, Visual Basic, HTML, CSS, MySQL, PHP, Javascript.

PROJECTS

Master's Thesis 2015: Debugging Memory Managers with Fine-Grained Memory Permissions

Tufts Polyhack 2014: Shadow Memory

Automatic Printf-Debugging in C

Using Probabilistic Programming Languages to Model Game Heuristics

DeckBuild: A Declarative Domain-Specific Language for Card Game Design

Visual Geolocation Based Black and White Listing

Dotfiles & Scripts

TEACHING EXPERIENCE

Teaching assistant (Tufts): Operating Systems, Networks, Internet-Scale Distributed Systems
Lab teaching assistant (Bucknell): Computer Architecture, Programming Languages, Intro to CS, Intro to Physics I & II
Grader (Bucknell): Quantum Mechanics, Electronics, Intro to Physics I & II

OPERATING SYSTEMS

Sept. 2015 - Present: Arch Linux (x86-64 machines, raspberry pi, pogo plug)
Fall 2010 - Oct. 2015: Ubuntu / Debian (x86 machines, raspberry pi)
2005 - 2012: Windows

REFERENCES

Samuel Z. Guyer
Computer Science Dept.
Tufts University
sguyer@cs.tufts.edu
Relation: Advisor (2013 - Present)

Noah Mendelsohn
Computer Science Dept.
Tufts University
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Professor while TAing (2013 - 2014)

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