William M. Dignazio

Current: 1535 South Ave, Rochester, NY 14620 Home: 1650 Warrendale Bayne Rd, Baden, PA 15005

Phone: (724) 831-7693

wdignazio@gmail.com willdignazio.com

Education

Rochester Institute of Technology - New York

rit.edu

Aug. 2011 - Present

Undergraduate Computer Science Student

- Expected Graduation Date: June 2016

- Core Courses:
 - * Computer Organization
 - * Computer Science Theory
 - * Concepts of Parallel & Distributed Systems
 - * Data Communications

Skills

- Languages: Assembly (x86, MIPS), C, Java, Julia, Python
- Tools: Autotools, CMake/Make, Emacs, Git, LaTex, Subversion, Vi/Vim
- Concepts: Lockless Design, Parallel & Distributed Systems, Systems Programming
- Platforms: Hadoop, OpenMP

Professional Experience

RITgithub.com/WillDignazio/hrfs Research Assistant October 2014 - March 2015

- Assistant to Distributed Systems professors at RIT
- Research into performance implications of block replication
- Implementation as a drop in replacement of HDFS
- Independent work and management accompanying studies

Exablox exablox.com

File System Performance Intern

June 2013 - January 2014

- Tuned and optimized our object-based file system
- Researched and worked on lockless hash table implementation
- Worked with various FUSE based mechanisms and third party libraries
- Developed Octeon hardware interfaces for our file system
- Rendered statistics and generated benchmark marketing data

Information and Technology Services

rit.edu/its

June 2012 - January 2013

- Handled software maintenance and feature tickets for in house applications
- Dealt with critical data, and university requirements

Newstex newstex.com March - May 2012

- Web Programmer
 - Worked with cloud applications, including Boto and Botoweb.
 - Designed and implemented data mining utilities for LinkedIn, Google Plus, and Twitter.

Online Presence

LinkedIn: linkedin.com/in/slackwill Githhub: github.com/WillDignazio

Blog: willdignazio.com

Infrastructure Engineer

Twitter: twitter.com/WillDignazio

Projects

Available on github.com/WillDignazio.

• SOS (Sandbox Operating System)

C

- Open Source Kernel: Formally called "Foundation", it is a microkernel built off the specs provided by the Intel x86 Architecture manuals, and various online wikis.
- Most hardware will support the system, being that its native architecture is x86. Recent design changes that have yet to be implemented allow portability to other architectures, such as ARM.

• Atlas Assembly

- Intel Architecture bootstrap binary, boot arbitrary C or C++ code linked against it. Allows for quick system development, and simple x86 embedded device coding.
- Supports 16 and 32 bit operation, features simple graphics library for debugging and standard output.

• slackbot C

- A virtual bot designed to administrate our IRC channels, giving the proper users automatic administrative access, and guests restricted access.
- Integrates with LDAP to identify users, as well as connects and operates over SSL for secure authentication and data gathering.

• asmblog Assembly

- Blog platform written in NASM (Netwide Assembly, designed for use on 64-bit x86 operating systems.)
- Uses FCGI and and custom routines to serve web content, can be used in tandem with any web server, my server hosts a build of asmblog with the NGINX web server.

• PAGEFAULT Printed Content

- Floor research and development journal, focusing on member project development and design.
- Posted on a bi-weekly basis, with regular submissions, averaging 3 posts per release.