Matt Nicolls

100 S Santa Fe Ave, Apt 536, Los Angeles, CA 90013 630-825-5499 - matt.m.nicolls@gmail.com

Education

University of Illinois at Urbana-Champaign

May 2014

• Bachelor of Science in Electrical Engineering, Minor in Computer Science

3.4/4.0 GPA

Course Work

Data Structures + Honors Distributed Systems
Communication Networks Artificial Intelligence
Computer Graphics Computer Engineering 1
Digital Systems Lab Digital Communications

Computer Systems Engineering Theory of Computation
Digital Signal Processing Analog Signal Processing
Probability with Engineering Matrix Theory
Electronic Circuits Semiconductor Devices

Work History

Gridspace, Software Engineer, Python, Django, Redis, React, Objective C

Los Angeles, CA

Worked on small team and iterated on customer feedback

October 2014-Present

Designed and implemented full stack solutions in a variety of languages

Aspen - Contractor for Verizon, Software Engineer, C# and Java

Chicago, IL

Proposed and implemented a Storm prototype

June 2014-October 2014

Added features to existing C# codebase in .NET framework and SQL

FarmHand, Lead Developer, Python and Android/Java

Champaign, IL

Student startup with crop science graduate student

September 2013-October 2014

- Built leaf classification system, prototype in python and product on android
- Chosen for Illinois Corporate Startup Challenge and presented to John Deere

Interactive Intelligence, Development Intern, Edge Group, C++

Indianapolis, IN

Optimized existing SIP library for loopback case

May 2013-August 2013

- Implemented library functions for parsing history headers in SIP messages
- Passed code reviews and documented work on company wiki

Class Projects

Built distributed Key-Value store, C++, Partner project

Fall 2013

- Design featured: passive replication, failure detection, hash point routing, replication factor of three, three consistency levels
- Used: Google Protocol Buffers, Google Test, Cmake, Boost ASIO
- Built an database of movie titles that could be searched with a keyword

Undergraduate Research, Java

Spring 2013

- Built a robotics path planning simulation for applications in a warehouse setting
- Basis for algorithm is a modified A* search

Built Linux/UNIX based operating system, C and x86 assembly, Team of four

Fall 2012

 OS implemented: paging, read-only file system, round robin scheduling, three terminals/ processes, system calls, user program execution, RTC, PIT, and keyboard interrupt handlers

Awards, Activities

Eagle Scout - Ultimate Frisbee Player - Krav Maga Student

Startup Weekend, Team Placed 6th

November 16-18, 2012

Developed a business plan and presented a live demo to judges

Formula Hybrid, Accumulator Subsystem Leader, Team Treasurer

August 2010-May 2012

Designed and implemented: high voltage layout, designed accumulator packaging, and BMS