

Education

University of Notre Dame
Reilly Dual-Degree Program
B.S. Computer Science
B.A. Graphic Design
Graduating December 2014

Technical Skills

Comfortable with:
Python, Java, JavaScript, PHP,
C/C++, Android SDK,
SQL, Flask, HTML5, CSS3, Jenkins

Familiar with:
Ruby, MIPS, AIX, Django, Rails, Redis

Leadership and Activities

Project Fresh Dance Crew
Breaking Commissioner, 2012 – present

Wabruda
Webmaster, 2011 – present

Stanford Hall Council
Webmaster, 2011 – present

Relevant Coursework

Theory

Design & Analysis of Algorithms
Discrete Mathematics
Data Structures
Theory of Computing
Operating Systems
Computer Architecture
Logic Design
Database Concepts
Human Computer Interaction
Healthcare Analytics
Data Mining

Programming

Fundamentals of Computing I/II (C/C++)
Mobile Application Projects (Java)
Android Application Development (Java)
Building Web Applications (ColdFusion)
Programming Paradigms (Python)
Database Concepts (PHP/MySQL)
Operating Systems (C, C++)
Data Structures (C++)
JavaScript

Design

2D Foundations (Adobe Creative Suite)
Design Drawing (Sketching)
Visual Communication Design I/II (Adobe)
Technical Concepts of Visual FX (Maya)
Interaction Design

Interests and Hobbies

Web Design and Development
Android Application Development
User Interface Design
Breakdancing

Professional Experience

May 2014 – Aug 2014 **IBM | Software Developer Intern | Austin, TX**

- Ported various open-source software (Cassandra, Snappy-Java, Qpid) to IBM's POWER architecture (Little and Big Endian) and AIX.
- Automated software builds and tests through Jenkins (GitHub hooks).

May 2013 – Aug 2013

- Developed an Android application for remote management of AIX and PowerSC machines.
- Developed a real-time security application for PowerSC systems, with an Android application for receiving notifications and remote security patching and a web application for data management and user activity feeds.

Aug 2013 – present **iCeNSA | Undergraduate Research Assistant | Notre Dame, IN**

- Studying machine learning and data mining concepts for applications within healthcare, currently targeting middle-school obesity.

Feb 2013 – June 2013

- Developed an Android application for assisting geriatric patients living in nursing homes by collecting data on daily habits and well-being, while also reminding patients about medication and daily exercise.

Jan 2012 – Dec 2012 **Cooperative Computing Lab | Research Fellow | Notre Dame, IN**

- Developed a Python script to automate scientific simulations via a Master-Worker distributed computing framework.
- Developed features (i.e. XML data exporting) and fixes for BXGrid, a bioinformatics research web grid, using PHP and MySQL.

Aug 2011 – May 2012 **College of Engineering | Teaching Assistant | Notre Dame, IN**

- Assisted professors in teaching Introduction to Engineering Systems I/II lab.

May 2011 – Aug 2011 **Department of Electrical Engineering | Research Fellow | Notre Dame, IN**

- Developed standard for testing quilt-packaged microchips' bond strength.

Projects

Apr 2013 – May 2013 **Audite** (<https://github.com/iheanyi/Audite>)

Music streaming web application, utilizes EchoNest's and YouTube's API to recommend and stream artists based on an initial input by the user.

Feb 2013 – present **Tubalr** (<http://goo.gl/xZ90b>)

Android music streaming application, built on top of EchoNest's and Tubalr's API. Songs are streamed from YouTube; currently has over 2,000 active installs. Awarded Second Place at the Schurz Innovation Challenge.

Nov 2012 – Dec 2012 **INCAA** (<https://github.com/iheanyi/dbconceptsfinal>)

PHP web application for visualizing NCAA football statistics, with data stored in an OracleSQL database.

Nov 2012 – present **Irish Class Search** (<http://goo.gl/oO5zO3>)

Android application for easy lookup of Notre Dame courses from phones.

Feb 2011 – May 2011 **Otter Swag** (<https://github.com/iheanyi/otter-swag>)

One button, side-scrolling game developed in C++ using the SDL graphics library. Voted by peers as overall Best Project in the class.

Awards and Achievements

June 2013 **First Place | MakeWithMoto Makeathon | Motorola Mobility | College Station, TX**

May 2013 **Second Place | Schurz Innovation Challenge | Schurz Media, Inc. | Notre Dame, IN**

Summer 2011 & 2012 **Balfour-Hesburgh Fellow | Balfour-Hesburgh Scholars Program | Notre Dame, IN**

May 2010 **Balfour-Hesburgh Scholar | Balfour-Hesburgh Scholars Program | Notre Dame, IN**