# **I**HEANYI **E**KECHUKWU

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#### 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

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 packages (Cassandra, Snappy-Java, Qpid) to IBM's POWER architecture.

May 2013 - Aug 2013

- Developed 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 application 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 a standard for testing quilt-packaged microchips' bond strength via a modified pull-test standard.

# **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**

First Place | MakeWithMoto Makeathon | Motorola Mobility | College Station, TX June 2013 Second Place | Schurz Innovation Challenge | Schurz Media, Inc. | Notre Dame, IN May 2013 Summer 2011 & 2012 Balfour-Hesburgh Fellow | Balfour-Hesburgh Scholars Program | Notre Dame, IN May 2010  $\textbf{Balfour-Hesburgh Scholar} \ | \ \textbf{Balfour-Hesburgh Scholars Program} \ | \ \textbf{Notre Dame, IN}$