

William J. Markley III

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EDUCATION

UNIVERSITY OF NOTRE DAME

Bachelor of Science in Computer Engineering, GPA: 3.88/4.00

Tau Beta Pi, Eta Kappa Nu, and Upsilon Pi Epsilon, Dean's List: Fall 2014-Fall 2016, BP Scholar

Notre Dame, IN

May 2018

UNIVERSITY OF NOTRE DAME ROME SUMMER PROGRAM

Summer 2016

EXPERIENCE

UNIVERSITY OF NOTRE DAME

Bioinformatics Laboratory Research Assistant, Dr. Scott J. Emrich

Notre Dame, IN

Spring 2016-Present

- Implemented a suffix tree to sketch genomes and compute corresponding distance matrices
- Wrote Python scripts to mask k-mers in given FASTQ files
- Used Velvet, MUMmer, & Jellyfish bioinformatics software to analyze gene pools

PENSKE AUTOMOTIVE GROUP

Bloomfield Hills, MI

Software Development Intern, Application Development Team

Summer 2016

- Wrote exception handling C# to enable functionality in the most widely used production web application
- Created SQL script to update both the production and development SQL Server environments
- Modified connection strings of Web.config files for all applications in preparation for SQL migration

Information Technology Intern, Application Development Team

Summer 2015

- Developed IT solutions in VBA affecting over 13,000 employees of a Fortune 200 company
- Exposed to Agile Kanban development cycle as well as scoping, requirements, testing & deployment
- Analyzed company data to detect trends and optimize company resources

GOOGLE INC.

Notre Dame, IN

Student Ambassador

Summer 2015-Spring 2016

NOTRE DAME SILICON VALLEY TECHNOLOGY TREK

San Francisco, CA

Selected Participant

Spring Break 2016

- Invited to visit the headquarters of Salesforce, Cloudera, Google, Facebook, Pandora, HP Enterprise, Flypside, Zynga, and SKTA Innopartners to learn about their technologies

PROJECTS

IRISH LINK, Swift, JavaScript

Spring 2017

- Created an iOS app with a Node.js and MongoDB backend to connect ideators and developers

VALUMODEL.COM, Python, JavaScript, HTML, CSS

Fall 2016

- Designed a Linux Apache MySQL Python web application to generate DCF valuations

GUITAR FREQUENCY SPECTRUM ANALYZER

Summer 2016

- Wired circuit to read analog signals and display corresponding frequency spectrum using an Arduino

MARKIT, C++

Summer 2016

- Developed a cross-platform desktop application that can open, save, and edit ASCII text

FIGHTING IRISH GAME, C++

Spring 2016

- Designed an Object-Oriented Notre Dame Athletics-themed survival game with three team members

BATTLESHIP, C

Fall 2015

- Built an interactive simulation of the board game BATTLESHIP with a detailed Graphical User Interface

LEADERSHIP

ENTREPREURSHIP SOCIETY OF NOTRE DAME

Notre Dame, IN

Co-President, Past Chief Financial Officer

Fall 2014-Present

- Invited successful entrepreneurs to speak to club members about their experiences
- Led a workshop on building a mobile application for non-technical students

GENERAL ELECTRIC LEADERSHIP DAY

Notre Dame, IN

Selected Participant

Spring 2016

BP DISCOVERY DAYS, Leadership Development Conference

Houston, TX

Selected Participant

Summer 2015

ACTIVITIES & SERVICE

Entrepreneurship Leadership Council, *Board Member*

ACM/Computer Club, *Member*

Shamrock Leadership Series, *Selected Member*

South Bend Center for the Homeless, *Volunteer*

SKILLS

Languages: C/C++, Python, Java, Shell Scripts, MIPS, Verilog HDL, HTML, CSS

JavaScript, Swift, SQL, MATLAB, VBA, LATEX

Applications & Systems: UNIX, Git, VirtualBox, Visual Studio, Quartus II, Microsoft Excel, Creo

Hardware: Altera Cyclone FPGA, Raspberry Pi, Arduino Microcontroller