

# William J. Markley III

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## EDUCATION

### UNIVERSITY OF NOTRE DAME

*Bachelor of Science in Computer Engineering, GPA: 3.88/4.0*  
*BP Scholar, Dean's List: Fall 2014-Spring 2016, National Merit Scholar Commended*

Notre Dame, IN  
May 2018

### UNIVERSITY OF NOTRE DAME ROME SUMMER PROGRAM

Summer 2016

## EXPERIENCE

### NOTRE DAME BIOINFORMATICS LABORATORY

*Research Assistant, Dr. Scott J. Emrich*

Notre Dame, IN  
Spring 2016-Present

- Wrote Python scripts to mask k-mers in given FASTQ files
- Used Velvet, MUMmer, & Jellyfish bioinformatics software to analyze gene pools

### PENSKE AUTOMOTIVE GROUP

*Software Development Intern, Application Development Team*

Bloomfield Hills, MI  
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

### GOOGLE INC.

*Student Ambassador*

Notre Dame, IN  
Summer 2015-Spring 2016

### NOTRE DAME SILICON VALLEY TECHNOLOGY TREK

*Selected Participant*

San Francisco, CA  
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

### PENSKE AUTOMOTIVE GROUP

*Information Technology Intern, Application Development Team*

Bloomfield Hills, MI  
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

## PROJECTS

### 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

### GIGOT CONNECTIONS, Google Apps Script (JavaScript based)

Fall 2015

- Launched a platform to connect alumni teams and over 135 students in a business plan competition

### CHESS, MATLAB

Spring 2015

- Designed and tested an interactive simulator with offensive and defensive algorithms to direct moves

## LEADERSHIP

### ENTREPREURSHIP SOCIETY OF NOTRE DAME

*Co-President, Chief Financial Officer, Member*

Notre Dame, IN  
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

*Selected Participant*

Notre Dame, IN  
Spring 2016

### BP DISCOVERY DAYS, Leadership Development Conference

*Selected Participant*

Houston, TX  
Summer 2015

## ACTIVITIES & SERVICE

Entrepreneurship Leadership Council, *Board Member*

ACM/Computer Club, *Member*

International Market Watch, *Past Region Leader*

Notre Dame Sailing Team, *Participant*

Shamrock Leadership Series, *Selected Member*

South Bend Center for the Homeless, *Volunteer*

## SKILLS

*Languages:* C++, C, Python, Java, Shell Scripts, Verilog HDL, HTML, CSS, MATLAB, VBA, LATEX

*Applications:* Git Version Control, VirtualBox, Visual Studio, VIM, Quartus II, Microsoft Excel, Creo

*Hardware:* Altera Cyclone FPGA, Raspberry Pi, Arduino Microcontroller