William J. Markley III

wmarkley@nd.edu | willmarkley.com | github.com/willmarkley

EDUCATION

UNIVERSITY OF NOTRE DAME　　　　　　　　　　　　　　　　Notre Dame, IN
Bachelor of Science in Computer Engineering, GPA: 3.88/4.0　　　May 2018
BP Scholar, Dean's List: Fall 2014-Spring 2016, National Merit Scholar Commended

UNIVERSITY OF NOTRE DAME ROME SUMMER PROGRAM　　Summer 2016

EXPERIENCE

NOTRE DAME BIOINFORMATICS LABORATORY　　　　　　Notre Dame, IN
Research Assistant, Dr. Scott J. Emrich　　　　　　　　　　　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　　　　　　　　　　　　　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

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

PENSKE AUTOMOTIVE GROUP　　　　　　　　　　　　　Bloomfield Hills, MI
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

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　　　　　　Notre Dame, IN
Co-President, Chief Financial Officer, Member　　　　　　　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*
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