# David Mattia

www.david-mattia.com dmattia@nd.edu (612)437-8532

### Education

### University of Notre Dame

Computer Science Major Class of 2017

GPA: 3.96/4.0

Lakeville South High School

Class of 2013

### **Technical Skills**

#### Proficient in:

C/C++, Java, HTML/CSS

#### Familiar with:

Python, JavaScript, Swift, Obj-C, git, UNIX scripting

### Relevant Coursework

#### Freshman Year:

• Introduction to Engineering

### Sophomore Year:

- Fundamentals of Computing I A
- Discrete Mathematics

### Currently Taking:

- Logic Design
- Fundamentals of Computing II
- Basic Unix for Engineers
- Research with Dr. Poellabauer
- Introduction to Probability

## Work Experience

### Weight Trainer

- Coached highschool sports teams at Lakeville South High School for two years
- Created work out programs for eight different sports groups focusing on specific muscle groups they required
- Managed weight room activities including weight training, plyometrics, and conditioning

### Honors

IrishHacks 3rd Place Suzanne and Walter Scott Scholar Engineering Scholars Programm National Merit Scholar Commended AP Scholar with Distinction

### **Projects**

#### Foober

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Sept 26-28, 2014

- Created a native Android application implementing Parse databases and SMS Manager
- Handled backend of the database and created many UI elements

#### Web Design

Jan 2011, present

- Designed and Created www.david-mattia.com, www.david-mattia.com/ReillyWeekend, www.hiddenoakscottageretreat.com, and have worked on parts of multiple other sites
- Familiar with multiple front-end frameworks like bootstrap and foundation

#### Concussion Research

December 2013, present

- Analyzed speech analysis data from over 200 test subjects
- Determined the most important factors of speech in determining concussions based on data as well as the tests that showed to be the most useful

#### Chiellini - A Pacman Varient Nov 2014, Dec 2014

• Recreated the classic game Pacman in C with the Xlib library for graphics

#### Sudoku Algorithm Testing Feb 2014, May 2014

- Developed and tested three unique algorithms on their effectiveness at solving sudoku puzzles
- Used multiple criteria for effectiveness such as time complexity, correctness with different types of puzzles, space complexity, and ease of implementation

#### Calculator Programming Sept 2009, June 2013

- Created over 1,000 functional math programs for TI83/84s
- Launched an app to compute many common problems on the ACT using Z80 Assembly

### Volunteering

#### Blood Drive Coordinator

June 2012, present

- Coordinated eight blood drives through the American Red Cross
- Contacted potential donors, reserved space, advertised, and organized day of activities
- Member and active volunteer of the Red Cross Club of Notre Dame

#### Muscular Dystrophy Camp Counselor

June 2013, June 2014

- Cared for teenage camper with Duchenne muscular dystrophy
- Attended to all daily responsibilities and activities