# MAGGIE CASALE

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#### **EDUCATION**

### University of Minnesota-Morris

May 2016

B.A. in Computer Science Minor in Mathematics

#### CLASSWORK

Data Structures, Development of Software Design, Programming Languages: Human-Computer Interface Design, Models of Computing Systems, Algorithms and Computability, Senior Seminar

#### TECHNICAL SUMMARY

Systems Java, JavaScript, HTML, MEAN stack (MongoDB, Express, AngularJS, & Node.js),

Xcode, Swift, Neo4j, Titan, Gremlin, TinkerPop, Bash, C, Ruby, Unix Shell, JFLAP, Perl, Jython (JES), R, Latex, GitHub, Subversion, VisualVM, Photoshop, Windows,

Mac, Linux experience

Processes Agile Development, Version Control, Pair-programming, Unit Testing

#### RELEVANT EXPERIENCE

## Morris Academic Partnership with Professor Nic McPhee

August 2015 - Current

Morris, MN

Data Manager & Analyst

- · Using graph database tools (Neo4j, Titan, TinkerPop, Gremlin) to explore ancestries in evolutionary computation
- · Understanding how evolutionary tools such as selection, recombination, and mutation work together to construct novel improvements

Senior Seminar Fall Semester 2015

- · Completed an in-depth survey of research literature in assistive technologies, with a focus on touchscreen interaction for motor-impaired users.
- · Analyzed various published works, synthesized their contents, and produced a six-page research paper on my work. This work was presented formally in a conference setting, December 5th.

## Morris Academic Partnership with Professor K.K. Lamberty

Summer 2015

Web/Application Designer & Developer

Morris, MN

- · Continued development on WordRiver & StoryBuilder, a MEAN stack website & iOS application
- · Redesigned layout of WordRiver interface & API models
- · Modified StoryBuilder to access relevant information from WordRiver
- · Presented demo of work at Interaction Design and Children conference in Boston, July 2015

#### Directed Study: Web Design & Development

Spring 2015

Web Designer & Developer

Morris, MN

- · Continued development on URSA Major, a MEAN stack website for the University of Minnesota, Morris' Undergraduate Research Symposium
- · Kept group of five on task and organized
- · Added testing & error messages for development
- · Fixed bugs & improved upon the website's features