

MaggieCasale

contact

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<http://casal033.github.io>

languages

Java, JavaScript,
HTML, CSS, Clojure,
Swift, Objective-C,
C, Ruby, Bash Shell, &
Unix Shell

libraries & tools

MEAN stack
(MongoDB, Express,
AngularJS, Node.js),
Xcode, GitHub,
Subversion, Gremlin,
TinkerPop, Perl,
Jython, VisualVM,
Graphviz, RStudio,
L^AT_EX & Photoshop

databases

MongoDB,
Neo4j,
& Titan

systems

Linux,
Mac,
& Windows

processes

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

education

2012–2016 **B.A.** in Computer Sciences [3.307]
Minor in Mathematics
Expected Graduation: May 2016

University of Minnesota, Morris

coursework

Data Structures, Development of Software Design, Algorithms & Computability, Human-Computer Interface Design, Models of Computing Systems, Evolutionary Computation & Artificial Intelligence, Senior Seminar

experience

Fall '15–Now **Morris Academic Partnership with Professor Nic McPhee**

Morris, MN

Data Manager & Analyst

- Using graph database tools (Neo4j, Titan, TinkerPop, Gremlin) to explore ancestry runs in evolutionary computation
- Understanding how evolutionary factors such as selection, recombination, and mutation work together to construct novel improvements
- Working with Graphviz to create visualizations of these runs to better analyze how individuals improve from generation to generation
- Currently work involves a research paper for GTPT at Ann Arbor this May, as well as a visualization workshop for GECCO in Denver this May

Fall '15

Senior Seminar

Research, Technical Writing, and Presentation

- 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.

Summer '15

Morris Academic Partnership with Professor K.K. Lamberty

Morris, MN

Web/Application Designer & Developer

- 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

Spring '15

Directed Study: Web Design & Development

Morris, MN

Web Designer & Developer

- 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

interests

professional: I ♥ programming, hard work, being detail-oriented, organization, group work, research, documenting, and management.

personal: photography, traveling, golfing, scuba diving, being with friends or family, and learning new games.

