J. Hassler Thurston

34 Wild Berry Lane | Pittsford, NY 14534 | jthurst3@u.rochester.edu

SOFTWARE ENGINEERING INTERNSHIP QUALIFICATIONS

- **Programming Languages**: Proficient in Java, Python, HTML/CSS/Javascript, C, Wolfram Language/Mathematica; knowledge of Assembly, Scheme, PHP, Prolog, Matlab/Octave, Ruby
- **Programming Tools**: Proficient with Git/GitHub/Bitbucket, Bash shell/scripting, Heroku, MongoDB, Vim, Sublime Text, Markdown; knowledge of SQL, reStructuredText, Mercurial, Evothings, Continuous Integration, Emacs
- Broad understanding of an array of topics in Computer Science, from artificial intelligence and machine learning to natural language processing, data science and theory
- Proven independent initiative and problem solving skills demonstrated through completion of nine Coursera courses and many independent projects
- Confident communicator with clear speaking and listening abilities, enhanced through workshop leading and tutoring

EDUCATION

University of Rochester, Bachelor of Science in Computer Science, Rochester, NY (Expected May 2017)

- GPA 4.0 (Awarded Dean's List every semester)
- *Selected Coursework*: Advanced Algorithms, Computer Organization, Artificial Intelligence, Computer Models and Limitations, Computation and Formal Systems, Science of Data Structures, Honors Calculus III and IV

Coursera, www.coursera.com (2013-present)

- *Selected Coursework*: Machine Learning, Introduction to Data Science, Computer Networks, Startup Engineering, Natural Language Processing, Algorithms: Design and Analysis Parts I and II

SOFTWARE DEVELOPMENT AND RESEARCH EXPERIENCE

Research Assistant, Human-Computer Interaction Institute, Carnegie Mellon University (Summer 2015)

- Using node.js, designed a website to collect student feedback during a group presentation in real-time to improve presenters' presentation skills
- Enhanced skills in group work and creative problem solving
- Worked closely with design student to implement mock-ups of our user interface and run user tests

Research Assistant, Data Science and Artificial Intelligence Laboratory, University of Rochester (Fall 2014-present)

- Currently designing a word model that can predict and identify social media users susceptible to mental illnesses
- Using Python's BeautifulSoup library, designed a web scraper to extract information about thousands of individuals

Software Entrepreneurship Intern, Fitruvia Movement Analysis Systems (Summer 2014)

- Using Javascript, designed a full-body wearable technology system to give athletes real-time feedback on their body movements, using state-of-the-art heuristic methods and mathematical models
- Created extensive documentation and a number of tutorials to ease the transition for future developers

SELECTED PROJECTS AND COMPETITIONS

- **The Unsolved Problems Database —** created website using HTML/CSS/JS with NodeJS and MongoDB as a resource for people to learn about, create, discuss, and solve unsolved problems.
- **Computer Music —** created Mathematica code to output short musical compositions with use of genetic algorithms, melody, harmony, and counterpoint.
- **Automata Game —** created unique turn-based board game using cellular automata; inspired by John Conway's "Game of Life", Stephen Wolfram's "A New Kind of Science", and Coursera's Model Thinking class.
- **2nd Place, Machine Learning, CS Games,** Sherbrooke, QC (with Jack Valinsky, Spring 2015)
- **3rd Place, Relay Programming, CS Games,** Montreal, QC (with Dan Hassin and Joe Brunner, Spring 2014)
- **Best Command-Line Interface, HackNY Hackathon,** Columbia University (with Dan Scarafoni, Spring 2014)

TEACHING EXPERIENCE

- **Tutoring Chair and Tutor, Computer Science Undergraduate Council,** University of Rochester (Fall 2014-present)
- **Teaching Assistant,** Design and Analysis of Algorithms (Fall 2015), Computer Models and Limitations (Spring 2015), Computation and Formal Systems (Fall 2014, Fall 2015)
- **Workshop Leader**, Design and Analysis of Algorithms (Fall 2015), Computation and Formal Systems (Fall 2015), Computer Models and Limitations (Spring 2015)

Website: www.hasslerthurston.com Sample code at: github.com/jthurst3