Matthew S. Levin

(914) 629-6775 | mlevin6@u.rochester.edu | matt-levin.com

Overview: Detail-oriented software developer with a passion for artificial intelligence and machine learning. Experience automating processes, breaking down large tasks into manageable sections, and finding the most efficient way to tackle a real world problem. Team player with the drive to always keep learning, desire to make the world a better place, and determination to create the best product possible.

Education

University of Rochester, Hajim School of Engineering and Applied Sciences — *Rochester, NY*
Bachelor of Science in Computer Science **(Overall GPA: 3.79 / 4.00)** — **May 2018** *(Anticipated)*

- **Notable Coursework:** Artificial Intelligence, Algorithms, Linear Algebra with Differential Equations, Probability and Mathematical Statistics, Web Programming, Data Structures, and Computer Organization
- **Activities:** Golden Key International Honour Society, Computer Science Undergraduate Council (CSUG), Human Computer Interaction Lab (ROC HCI), and Intramural Soccer and Ultimate Frisbee

Skills and Interests

- **Programming Languages:** Java, Python, JavaScript, C++, C, OCaml, Bash, HTML, CSS, SQL, and Swift
- **Software and Tools:** NumPy, Git, Pandas, scikit-learn, Node, Postman, jQuery, Ajax, Slurm, and Xcode
- **Research Interests:** Machine Learning, Artificial Intelligence, Big Data, and Pattern Recognition

Projects and Publications

Bayesian Inference *(Spring 2016)*

- Compares inference algorithms on probabilistic graph models in Java for Artificial Intelligence course
- Individually created an exact calculator and several approximation algorithms to comply with larger datasets

UR Bus *(Spring 2017)*

- Website and iOS app to track university shuttles in real time and find optimal routes using a graph algorithm
- Developed a custom API combining Google Maps JavaScript API and Transloc API for shuttle information
- Worked with one peer on engineering side, while other teammates focused on user research and evaluation

Automated Reasoning *(Spring 2016)*

- Finds or proves solutions to systems of propositional logic using Java for Artificial Intelligence course
- Worked individually to implement algorithms that identify a solution, or prove a value is true in all solutions

Cache Simulator *(Spring 2017)*

- Evaluates performance of different cache configurations to minimize misses, developed in C with a partner

T. Sen, K. Hasan, M. Tran, **M. Levin**, Y. Yang, and M. E. Hoque, Say CHEESE: the Common Habitual Expression Encoder for Smile Examination and its Application to Analyze Deceptive Communication, *Submitted*.

Work Experience

Undergraduate Researcher — June 2017 – Present
Human Computer Interaction Lab | University of Rochester — *Rochester, NY*

- Apply machine learning techniques to perform automated lie detection from audio and video
- Use hidden Markov models and clustering algorithms to recognize patterns in human conversation
- Deploy code on BlueHive supercomputing cluster to train and test models on massive dataset

Teaching Assistant — August 2017 – Present
Computer Science Department | University of Rochester — *Rochester, NY*

- Selected by professor to serve as teaching assistant based on previous performance in the course
- Mentor project teams in designing and building products to meet a specific consumer need
- Grade assignments and hold weekly office hours for Human Computer Interaction course

Information Technology Consultant — June 2016 – Present
Simon School of Business | University of Rochester — *Rochester, NY*

- Assist graduate students and professors in troubleshooting technical problems and configuring devices
- Automated printer configuration process for students by developing a one-click application in AppleScript

Volunteer Tutor — January 2017 – Present
Computer Science Undergraduate Council | University of Rochester — *Rochester, NY*

- Hold free weekly tutoring sessions for several computer science courses

Other Activities: Eagle Scout (Boy Scouts of America), music instructor, and avid guitarist and bassist