

# GABRIEL KAMMER

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## EDUCATION

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- MEng: Electrical Engineering and Computer Science** *Feb. 2023 - Feb. 2024*  
Massachusetts Institute of Technology, Cambridge, MA  
Advised by Adam Chlipala, MIT Programming Languages and Verification Lab
- BS: Computer Science and Engineering** *Sept. 2018 - Feb. 2023*  
Massachusetts Institute of Technology, Cambridge, MA *Cumulative GPA: 4.9/5.0*

## WORK EXPERIENCE

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- Formal Verification Engineer - Intel** *Apr. 2024 - Oct. 2024*
- Performed datapath verification of processor microarchitecture design using ACL2 theorem prover.
  - Wrote formal specifications for arithmetic instructions and proved RTL designs match specification.
- Formal Verification Researcher (Intern) - Sandia National Labs** *Oct. 2023 - Jan. 2024*
- Performed original research to determine viability of verified model checking using regular expression-based specifications with symbolic variables.
  - Designed and proved correctness of human-readable regexp-based specification languages using Coq.
- Undergrad Researcher - Programming Languages & Verification Lab, MIT** *Feb. 2022 - Dec. 2022*
- Contributed to Pyrosome project, a framework for verified compilers.
  - Wrote formal Coq machine proofs of correctness for various aspects of compilers.
- Software Engineering Intern - Jane Street** *Jun. 2021 - Aug. 2021*
- Interned for 5 weeks on each of two core services teams of the firm.
  - Improved upon two existing services relating to distributed data stores and security.
- Software Engineering Intern - Frictionless Systems** *Sept. 2020 - May 2021*
- Worked on extracting valence and arousal information from physiological data.
  - Developed time-series neural network models for classifying mental states.

## PROJECTS

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- Personal Website** *Ongoing*
- Created from scratch using custom HTML/CSS generator Python scripts.
  - See [kammer.xyz/blog/projects](http://kammer.xyz/blog/projects) for more information on projects I have done.
- Strava Data Collection** *Mar. 2021*
- Scrapes Strava for a user's activities, and uses data for more detailed analyses using R.
  - Generates aggregated heatmaps, continuous fastest times per distance, and more.
- Set Solver** *Sept. 2019*
- Detects and identifies Set cards from image, tells user if any sets exist.
  - Does not use any pre-made CV libraries: everything built in standard Java.
- Helmsmen Innovative** *Sept. 2017 - Jun. 2018*
- Designed and prototyped a wheelchair designed for the blind and visually impaired.
  - Allows the visually impaired to move in wheelchairs around workplace obstacles, avoid stairs, etc.