

# DAVID LAPRADE

davidlaprade.github.io  
github.com/davidlaprade

david.laprade@gmail.com  
www.linkedin.com/in/davidlaprade

## SKILLS

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- Intermediate knowledge of Ruby, Rails; working knowledge of HTML, CSS, Javascript/jQuery, Twitter Bootstrap, MySQL, Git, Linux (Ubuntu), Heroku, and Amazon Web Services
- Statistical analysis of large data sets (whole-genomes, microarrays) with 100+ thousand values
- Fluency in Propositional Modal Logics K, D, T, S4, S5, in Constant and Varying Domain Models for Quantified Modal Logics, 1<sup>st</sup>-Order, 2<sup>nd</sup>-Order, and Propositional Languages; Tableaus, Axiom Systems, Natural Deduction Systems, meta-theoretic results for each, and Model Theory

## WORK EXPERIENCE

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### Startup Institute

*Jun '14 to Aug '14*

Built web applications with the following features and functionalities:

- modern styling with HTML5 and CSS3, Google fonts, Twitter Bootstrap; responsive design using jQuery and jQuery plugins
- users, admins, guests (Devise), user-side input validations, captcha-validations, password encryption, custom routing, embedded routing, integration with Google Maps API, automated email notifications via Sendgrid, user image upload via Carrierwave
- created database migrations, seeded databases, established database permissions, set up many-many relationships and has-many-through relationships amongst SQL tables
- enabled static-asset and user upload storage on AWS S3 buckets, file hosting on AWS EC2 instances and on Heroku, environment variable guarding using dotENV

Coordinated with marketing and front-end to produce a marketing survey for Swipely

- worked as part of a 4 member team to produce a go-to-market strategy for a new product
- helped design and implement a mobile customer survey; performed data analysis on results

### Tufts University - <http://ase.tufts.edu/philosophy/graduate/grads.asp>

*Jan '13 to Jun '14*

Graduate Teaching Assistant (Logic)

- Modeled natural language semantics, e.g.. quantifier-expressions and presupposition failure
- Quantifier-expressions (e.g. “there is/are”, “all”, “some”)
  - Result: Tarskian semantics can be used to model both commital quantifier expressions, as in “There are many chairs in the room”, as well as non-commital ones, e.g. “There are many fictional characters”
- Presupposition failure (e.g. “The authors of Harry Potter are English”)
  - Result: definite descriptions cannot be handled by the standard model of how presupposition failure effects information content; that model is at best incomplete

### New England Institute of Technology - [www.neit.edu](http://www.neit.edu)

*Aug '12 to Jun '14*

- Professional Tutor – Math and Science Lab, Academic Skills Center
  - Tutor Anatomy, Physiology, Microbiology, Chemistry, Dosage Calculation
  - Taught/developed NCLEX Prep Course for graduate nursing students
  - Developed one semester Propositional Logic Course
  - Developed two semester Medical Terminology Course

**Research Technician**

- Analyzed data sets containing 100+ thousand data points to pinpoint statistically significant patterns of gene expression
- Coordinated research projects with 5-10 member teams
- 5 presentations at professional meetings; 2 publications in peer-reviewed journals

**EDUCATION**

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**Startup Institute**

- Web Development Immersive | Summer '14 | [www.startupinstitute.com](http://www.startupinstitute.com)
- Studied Ruby, Rails, Javascript

**Tufts University**

- MA in Philosophy | Specialization: Logic | Exp. Graduation Fall '14 | GPA 3.94/4.00
- Studied Model Theory, Computation Theory, Axiom Systems, Natural Language Semantics

**Providence College**

- BS in Biology | Specialization: Genetics | Grad. Spring '11 | Philosophy Minor | *Summa cum Laude* | GPA 3.93/4.00 | Full Tuition Scholarship

**PUBLICATIONS**

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- "Filamentation protects *Candida albicans* from amphotericin B-induced programmed cell death via a mechanism involving the yeast metacaspase MCA1." *Fungal Genetics and Biology*, revision in progress (submitted)
- "S-Adenosyl-L-Methionine protects the probiotic yeast, *Saccharomyces boulardii*, from acid-induced cell death." *BMC Microbiology*, 13:35. 2013
- "*Zingiber officinale* cytosolic glyceraldehyde-3-phosphate dehydrogenase (GAPC) gene, partial cds." *GenBank*. Accession number: JQ085994. 2012

**SELECTED COURSEWORK**

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|-----------------------------------|--------------------------------|------------------------------|
| ▪ Mathematical and Symbolic Logic | ▪ Calculus I+II+III            | ▪ General Chemistry I+II     |
| ▪ Computation Theory              | ▪ Statistics                   | ▪ Organic Chemistry I+II     |
| ▪ Modal Logic                     | ▪ Found. of Higher Mathematics | ▪ Genetics                   |
| ▪ Quantification                  | ▪ General Biology I+II         | ▪ Molecular and Cell Biology |
| ▪ Formal Theories of Truth        | ▪ General Physics I+II         | ▪ Immunology                 |