DAVID LAPRADE

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SKILLS

- Ruby, Rails, HTML, CSS, Javascript/jQuery
- 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, 1st-Order, 2nd-Order, and Propositional Languages; Tableaus, Axiom Systems, Natural Deduction Systems, meta-theoretic results for each, and Model Theory

WORK EXPERIENCE

Startup Institute   *Jun'14 to Aug '14*

Built web applications with the following features and functionalities:

- 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, 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   *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

Austriaco Laboratory - www.austriacolab.com   *Jan '09 to Aug '12*
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

Startup Institute
- Web Development Immersive | Summer '14 | 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

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

STANDARDIZED TESTS

- **GRE** – 167/170 Verbal, 161/170 Quantitative, 5.5/6.0 Writing   *2011*
- **SAT** – 750/800 Verbal, 690/800 Quantitative, 690/800 Writing   *2006*

ACTIVITIES

- Jazz Saxophonist (14 years)
- Elderly Outreach
- Correspondence Chess
- Running (30+ competitive 5K's)

SELECTED COURSEWORK

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