

Thomas Pouncy

Cambridge, MA 02138, USA • 484-680-6066 • thomas.pouncy@gmail.com • www.thomaspouncy.com

EDUCATION

Harvard University

Ph.D. candidate in Psychology

Boston, MA

Expected May 2022

Harvard University

B.A. in Economics

Boston, MA

2006 - 2010

RESEARCH AND TECHNICAL EXPERIENCE

Harvard University

Doctoral Researcher

Boston, MA

2016 - Present

- Used model-based reinforcement learning and bayesian inference to better understand how humans learn the rules of new environments.
- Developed scalable, distributed Python architectures capable of mimicking human learning behavior in complex video game tasks.
- Derived actionable insights by using computational models to identify meaningful learning behaviors in humans

Freebird

Technical Consultant

Boston, MA

2015 - 2016

- Helped transition company infrastructure from an outsourced, off-the-shelf architecture to a scalable foundation for an enterprise-level Ruby-on-Rails application.
- Worked with executives to identify long-term infrastructure goals and design a novel system capable of growing as their needs expanded.
- Collaborated with original development team to help ensure a smooth transition to the new system.

Reputation.com

Independent Data Science Contractor

Boston, MA

2015 - 2016

- Integrated new tools for text analysis of user reviews into an existing architecture on a short timescale.
- Used natural language processing techniques to identify topics of interest in large samples of online user reviews.
- Built tools to allow automatic comparison of key user populations in terms of affective linguistic identifiers.

Peer Squared

Chief Technical Officer

Los Angeles, CA

2014 - 2015

- Worked with CEO, CFO, and marketing department to identify resource bottlenecks in client offerings and develop new products to automate around key hurdles.
- Hired and trained a team of engineers, designers, and customer service representatives to quickly and efficiently pivot company architecture to a novel automated system.

- Researched and implemented cutting-edge computational modeling techniques to identify significant consumer behaviors in real time online shopping data and automatically implement informative A/B testing to improve client understanding of their customer base.

Peer Squared

Los Angeles, CA

Software Engineer

2010 - 2014

- Helped design, implement and manage a large-scale enterprise application for collecting, analyzing and acting upon complex, real-time behavioral data.
- Designed customer-facing analytics dashboards to quickly and concisely convey key consumer insights to clients.
- Flexibly adapted to fill new roles as needed, ranging from front-end development and design, to back-end architecture engineering and database management, to interviewing and training new hires.

Level Up!

Los Angeles, CA

Software Engineer and Technical Consultant

Jan. 2011 - May 2011

- Worked with prospective founder to design and build a life management gamification platform on a short release schedule.
- Researched a wide variety of potential frameworks before constructing a scalable Heroku application that the client could use and maintain on their own, even without a technical background
- Deployed a customer-ready final application within 3 months of beginning initial design.

LEADERSHIP EXPERIENCE

Harvard University

Boston, MA

Teaching Fellow

2018 - 2020

- Taught tutorial sections for undergraduates on developmental psychology, clinical psychology, and scientific writing.
- Designed and taught a new curriculum.
- Identified relevant materials, created assignments and grading rubrics, and managed all interactions with students

Harvard University

Boston, MA

Research Assistant Advisor

2018 - 2020

- Facilitated the growth and development of several undergraduate- and masters-level students while simultaneously ensuring that they produced consistent, high-quality research projects.
- Built teams of students with diverse technical backgrounds to assist with the design and maintenance of large-scale architectures for behavioral modeling and analysis.

Harvard University

Boston, MA

Capoeira Club Coach

2016 - Present

- Mentored students and helped them to build a grant-funded organization that has continued to grow across multiple generations of undergraduates.
- Provided martial arts instruction to promote fitness and mental well-being among a diverse

- population of student participants.
- Worked with the university administration to help ensure club longevity and financial stability.

Capoeira and Arts Association of New England

Treasurer

Boston, MA
2013 - Present

- Worked with acting president to create and fund a 501(c)3 non-profit organization that fosters mentorship, education and community outreach to the greater Boston area.
- Developed and implemented fund-raising strategies to help promote local businesses while simultaneously spreading awareness about under-served populations.
- Secured yearly grants from the city of Cambridge to fund international events designed to provide cultural experiences that would otherwise be inaccessible to local residents.

SKILLS AND INTERESTS

Programming languages: Python, Ruby on Rails, R, HTML, Javascript, CSS, Node.js, PHP, Perl
Database technologies: MySQL, MongoDB, Hadoop, PostgreSQL
Other technical tools: AWS (E.G. EC2, lambda, etc.), SLURM-based distributed systems
Languages: Portuguese and French
Interests: Martial arts, game design, story telling, teaching

SELECTED PUBLICATIONS

- **Pouncy, T.**, & Gershman, S.J. (submitted). [Inductive biases in theory-based reinforcement learning](#).
- **Pouncy, T.**, Tsividis, P., & Gershman, S.J. (2021). What is the model in model-based planning? *Cognitive Science*, 45, e12928.
- Tsividis, P.A., Loula, J., Burga, J., Foss, N., Campero, A., **Pouncy, T.**, Gershman, S.J., & Tenenbaum, J.B. (submitted). [Human-level reinforcement learning through theory-based modeling, exploration, and planning](#).

SELECTED TALKS

- **Pouncy, T.** “What are the rules? Structured priors for rule learning in complex environments.” Games and Cognition Workshop, CogSci, virtual meeting, July 26, 2021.