

Zachary Horvitz

zachary_horvitz@brown.edu | 425.999.9273 | zacharyhorvitz.com

EDUCATION

BROWN UNIVERSITY

MASTER'S IN COMPUTER SCIENCE

GPA 4.0/4.0

A.B. IN COMPUTER SCIENCE

A.B. IN ANTHROPOLOGY

GPA 3.96/4.0

SKILLS

PROGRAMMING

Python • Scala • Matlab • \LaTeX
Java • C/C++ • SQL • Javascript

TOOLS

Tensorflow • PyTorch • Keras • Caffe
OpenCV • AWS Mechanical Turk
Google Cloud • Pandas • Numpy
Web-scraping • D3 • Scikit-Learn
AWS EC2, S3, DynamoDB • CPLEX

TEACHING

DEEP LEARNING | BROWN

HEAD TA (2019) / TA (2018)

- Graduate Head TA for Daniel Ritchie's 360+ person class, managed staff of 32 students
- Wrote projects from CNNs, Transformers to Policy Grad.
- Collaborated with professor on open-source deep learning framework implemented entirely in Python
- Oversaw migration to Tensorflow2.0, addition of conceptual questions, and introduction of new assignments

COMP. LINGUISTICS | BROWN

TEACHING ASSISTANT (2019)

- Undergraduate TA for Eugene Charniak's seminar
- Taught parsing, NMT, contextual embeddings

AWARDS

Best in General Anthropology (2019)
Ntl. Merit Commended Scholar
CS2951-O Transport Logistics, 1st Place
CS1400 TRON Competition, 2nd Place

ACTIVITIES

Senior Staff Writer, Brown Noser
Brown University's Satirical Newspaper
thenoser.com/staff/Zachary-Horvitz

SAT Math Tutor

BEAM, After-School Mentoring

EXPERIENCE

INTELLIGENT ROBOT LAB | BROWN UNIVERSITY

GRADUATE RESEARCH

Spring 2020 - present | Providence, RI

- Advised by George Konidaris
- Ongoing research on leveraging graph priors for multi-task reinforcement learning in both continuous and discrete environments.

RLAB | BROWN UNIVERSITY

GRADUATE RESEARCH

Fall 2019 - Summer 2020 | Providence, RI

- Advised by Michael Littman
- Developed tools for automatically retrieving relevant real-world text context for news stories
- Demonstrated successful transfer-learning from abstractive summarization to satire generation
- Author, Context-Driven Satirical Headline Generation, ACL 2020 FigLang Workshop (Talk)

AI2 | ALLEN INSTITUTE FOR ARTIFICIAL INTELLIGENCE

RESEARCH INTERN

Summer 2018 | Seattle, WA

- Advised by Yejin Choi, Maarten Sap, Antoine Bosselut @ UW
- Investigated neural networks for common-sense story generation
- Integrated pipeline for extracting sequences of events from text, collating with Event2Mind corpus
- Developed ELMo based entity-augmented neural architecture that updates embeddings based on mental state inference for better generations

Spring/Summer 2015 | Seattle, WA

- Advised by Santosh Divvala and Ali Farhadi
- Coauthor, ECCV paper: "FigureSeer: Parsing Result-Figures in Research Papers"

THE DANIEL LAB | UNIVERSITY OF WASHINGTON

RESEARCH INTERN

Summer 2014 | Seattle, WA

- Developed and integrated OpenCV-based software for moth control in VR

EMPOR.CO | START UP

FOUNDER, FULL-STACK DEVELOPER

Summer 2015 - Spring 2017 | Providence, RI

- Mobile e-commerce project, clothing recommender engine

BPR | BROWN POLITICAL REVIEW

DATA BOARD ASSOCIATE DIRECTOR

Winter 2016 - Fall 2018 | Seattle, WA

- Directed projects by team of 10; infographics and data-driven articles

ACLU | ACLU OF MASSACHUSETTS

INTERN WITH TECH FOR LIBERTY TEAM

Summer 2017 | Boston, MA

- Analyzed newly released criminal policing data from BPD, Massachusetts
- Experience with criminal justice sector, data analysis, NLP, data visualization
- Built internal tools to measure racial disparities in lower-level arrests, stop-and-frisk