

# Zachary Horvitz

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## 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 •  $\text{\LaTeX}$   
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, staff of 32 students
- Cowrote projects from CNNs, Transformers to Policy Grad.
- 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
- Material covered 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 linguistic priors for multi-task reinforcement learning.

### 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

- Oversaw 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 D3 tools to measure racial disparities in low-level arrests, stop-and-frisk