WILLIAM MERRILL

(917) 558-3663 | william.merrill@yale.edu | viking-sudo-rm.github.io

EDUCATION

Yale University, *B.S. in Computer Science & Linguistics* | New Haven, CT Expected Spring 2019

- GPA: 3.86 / 4.00.
- Notable core CS courses: Complexity Theory (CPSC 468), Algorithms (CPSC 365), Systems (CPSC 323).
- Notable NLP courses: Advanced NLP (CPSC 677), NLP (CPSC 477), Neural Nets & Language (LING 380), Deep Learning Theory (CPSC 663).
- Notable math courses: Real Analysis (MATH 301), Vector Calculus and Linear Algebra (MATH 230/231).
- Taught CS, cryptography, and linguistics classes at New Haven middle schools via CodeHaven and Splash programs.
- Won 2016 freshman rap battle.

RESEARCH EXPERIENCE

Computational Linguistics at Yale, *Research Assistant* | Yale University Fall 2016—Present

- Lead author on ***Context-free transductions with neural stacks***, which was accepted to EMNLP 2018.
- Authored ***End-to-end graph-based TAG parsing with neural networks***, which was accepted to NAACL 2018.

Language Learning Lab, *Research Assistant* | Boston College Summer 2017

- Built machine learning models to detect fluency and native language of essays written by Spanish learners.
- Models are being used to automate large-scale online experiments about language acquisition.

Toronto Undergraduate Linguistics Conference, *Presenter* | University of Toronto Spring 2018

- Presented accepted paper ***A semantics of subordinate clauses using delayed evaluation***.

PROJECT AND WORK EXPERIENCE

Google, *Software Engineer Intern* | New York, NY Summer 2018

- Designed and implemented a full-stack deep learning project related to analytics for DoubleClick ads.
- Received full-time return offer and "Exceeds Expectations" rating.

StackNN, *Creator* | New Haven, CT Winter 2017—Present

- Wrote first open-source Python implementation of differentiable stacks and queues for neural networks.
- Project has been featured on PyTorch homepage and has 100+ GitHub followers.

Neural Network Dota 2 Drafting, *Creator* | New Haven, CT Spring 2017

- Designed deep learning model that picks winning teams in the video game Dota 2.
- Placed as a finalist in Yale's Grace Hopper Prize for Computer Science.

The Book of Thoth, *Creator* | New York, NY Spring 2016—Present

- Designed natural language puzzle game that has been approved for 2018 publication on Steam.
- Created optimized game engine and hieroglyphic spell interpreter from scratch in Java.

Yale Student Employment, *Teaching & Research Assistant* | Yale University Summer 2016-

- Undergraduate learning assistant for NLP (CPSC 477, spring 2018) and AI (CPSC 470, fall 2017).
- Research assistant at conferences on medieval East Asian languages: Tangut (spring 2018) and Kitan (summer 2016).

Youtube, *Partner & Content Creator* Spring 2012—Spring 2015

- Ran gaming channel SnorriDevTeam with over half a million views.