

Ethan Arnold

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EDUCATION

UNIVERSITY OF TEXAS

BS IN COMPUTER SCIENCE
AND MATHEMATICS
Expected May 2019 | Austin, TX
Turing Scholars Honors Program
GPA: 3.87

LINKS

github.com/masonsbro
[linkedin.com/in/ethanarnold](https://www.linkedin.com/in/ethanarnold)

COURSEWORK

FALL 2015

CS 314H: Data Structures
CS 311H: Discrete Math
CS 109: Competitive Programming

SPRING 2016

CS 429H: Computer Architecture
M 362K: Probability
M 340L: Linear Algebra

FALL 2016

CS 439H: Operating Systems
CS 345H: Programming Languages
M 365C: Real Analysis I
M 328K: Number Theory

SPRING 2017

CS 388M: Communication Complexity
CS 331H: Algorithms & Complexity
CS 378H: Data Mining
M 373K: Algebraic Structures I

SKILLS

PROGRAMMING

Python • Java • OCaml

EXPERIENCE

JANE STREET | SOFTWARE DEVELOPMENT INTERN

May 2017 - August 2017

- Created a configurable network monitoring tool that sends alerts upon certain types of state changes in the network.
- Implemented a new feature for more flexible administration of a core trading system.
- Designed and implemented a general-purpose library for certain kinds of logging and debugging.

GOOGLE | SOFTWARE ENGINEERING INTERN

May 2016 - August 2016

- Productionized Java tool for statically analyzing dependency graphs and identifying potential errors in configuration files.
- Designed robust solutions to ambiguous problems in the tool's specification to avoid any gaps in error detection.
- Collaborated with a team to determine key use cases of the tool and develop an intuitive command line interface as well as an API that can be used for automated testing.

PROJECTS

MUSICGEN

- Created website using Python and Django in order to learn about modern approaches to algorithmic music generation and understand how humans perceive music.
- Wrote genetic algorithms code for generating random music samples and modifying them based on crowd-sourced ratings.
- Designed and implemented administration panel for controlling spam ratings and monitoring progress of generated music samples.

ESSAY PLATFORM

- Created website for administering state-wide essay-format Academic Decathlon competitions.
- Collaborated with state director of high school academic competition to provide necessary administration features and support.

AWARDS

2016	4th place	ACM ICPC Regional Competition
2015	3rd place	National Instruments Rapid Prototyping Prize
2015	2nd place	Regional UIL Computer Science Individual Placing
2015	2nd place	National Academic Decathlon Team Championship
2015	1st place	State Academic Decathlon Team Championship
2015	2nd place	State Academic Decathlon Individual Placing
2014	4th place	National Academic Decathlon Team Championship
2014	2nd place	State Academic Decathlon Team Championship