

# Zachary Segall

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## EDUCATION

### GRINNELL COLLEGE

BA IN COMPUTER SCIENCE,

MATHEMATICS

Expected May 2018 | Grinnell, IA

Concentration in Policy Studies

Dean's List (All Semesters to date)

GPA: 4.0 / 4.0

## LINKS

Github:// [zhhsegall](https://github.com/zhhsegall)

LinkedIn:// [zachary-segall](https://www.linkedin.com/in/zachary-segall)

## COURSEWORK

### COMPUTER SCIENCE

Operating Systems & Parallel Algorithms

Software Design

Artificial Intelligence

Algorithms and OO Design

Imp. Problem Solving & Data Structures

Functional Problem Solving (Class Mentor x4)

Discrete Structures (Class Mentor)

### MATHEMATICS

Ergodic Theory

Real Analysis

Abstract Algebra

Combinatorics and Graph Theory

Linear Algebra

### OTHER

Microeconomics

Financial Economics

Foundations of Policy Analysis

## SKILLS

### SOFTWARE ENGINEERING

Pair Programming • Documentation

Writing • Java (Eclipse/IntelliJ) • OCaml

(emacs) • C (emacs) • Git & GitHub • R

(RStudio) •  $\LaTeX$

### PROJECT MANAGEMENT

Group Coordination • Prototyping •

Public Speaking • Peer Mentoring

### LANGUAGES

Spanish (Conversational) • German

(Conversational) • English (Native)

## EXPERIENCE

### AMAZON | SOFTWARE DEVELOPMENT INTERN

May 2017 - August 2017 | Seattle, WA

Worked with the Alexa Shopping team. Participated in agile development and scrum practices. All code was peer reviewed, polished, and shipped.

### GRINNELL CHILD STUDIES LAB | PROGRAMMING CONSULTANT

Sep 2016 - Nov 2016 | Grinnell, IA

Turned specifications into Python code in the Paradigm Experiment Builder for an individuation vs. categorization experiment. Communicated with (non-CS) researchers and produced documentation.

### TIPPING POINT MATH | WRITER

Aug 2016 - Present | Grinnell, IA

Write and edit engaging and accessible scripts for the Tipping Point Math educational Youtube channel, starting with the "Frustrated with Democracy?" video. Videos have an average audience between 10,000 and 30,000.

## RESEARCH

### GRINNELL COLLEGE | RESEARCH ASSISTANT

May 2016 - August 2016 | Grinnell, IA

Worked with Professor Osera to expand the Myth program synthesizer to be interactive rather than fully automated. Interaction allows the user to guide the synthesizer and thereby reduce time spent on program synthesis. Presented at the Midwest Regional PL Summit (12/02/16).

### GRINNELL COLLEGE | RESEARCH ASSISTANT

September 2015 - May 2017 | Grinnell, IA

Worked with Noyce Visiting Professor Ursula Wolz on three major projects:

- (2016-2017) Managed a team of seven to develop a prototype for Genderless in Germany, an educational German learning game.
- (2015-2016) Conducted exploratory research into how students with varying levels of experience interact with basic coding problems.
- (2015-2016) Promoted awareness for the Code Community through Hour of Code, CS education week, STEM fairs, and Ignite one-day classes. The Code Community continues as an after school program at the local library.

### GRINNELL COLLEGE | RESEARCH ASSISTANT

May 2015 - August 2015 | Grinnell, IA

Worked with Professor Kuiper to create data visualizations using the Shiny Package in RStudio from the Global Terrorism Database (150,000 data points). Also wrote corresponding labs which are currently in statistics classes at Grinnell.

## AWARDS, COMPETITIONS, & SOCIETIES

2017	National	Phi Beta Kappa
2015, 2016	National	ACM ICPC
2014, 2016	National	Putnam Exam
2014-2018	Grinnell	Trustee Scholarship
2014-2018	National	National Merit Scholarship