

# Jacob Burroughs

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## Education

**The University of Chicago**, Chicago, IL

Bachelor of Science in Computer Science, Mathematics, and Economics

June 2018

Relevant courses: Networks, Operating Systems, Computer Security, Parallel Computing, Computer Architecture, Programming Languages, Discrete Mathematics, Algorithms, Complexity Theory, Analysis in  $\mathbb{R}^n$ , Basic Algebra

## Experience

**Senior Software Engineer**

Oct. 2019-Present

**Software Engineer**

July 2018-Oct. 2019

**Software Engineering Intern**

June 2017-Sep. 2017

Instructure, Chicago, IL

- Develop next-generation assessment engine for the market-leading Canvas learning management system as part of a large team
- Optimized assessment engine to scale to tens of thousands of concurrent quiz takers
- Developed canary deployment strategy and tooling for a large-scale Rails application on AWS
- Designed and built seamless tooling for migrating thousands of dynamic DNS records between DNS providers, and worked with teams across the organization to coordinate adoption
- Mentored intern and taught commercial software development skills

**Software Engineering Intern**

June 2016-May 2017

Trustwave, Chicago, IL

- Developed components of threat analysis application for customers and security operations team
- Applied Agile methodologies to Java/Spring + Dart/Polymer application
- Integrated Java code with external data processing program
- Coordinated with other teams to integrate products

**Software Developer**

June 2015-June 2018

McKlein Company LLC, Chicago, IL

- Developed new CakePHP-based internal services portal integrating data from multiple databases
- Implemented features to make website mobile-friendly
- Created public-facing review system and contact forms, streamlining customer support experience

## Skills

**Languages** C, C#, Dart, HTML, Java, JavaScript, LaTeX, PHP, Ruby, SQL, Terraform

**Frameworks** CakePHP, Hibernate, React/Redux, Rails, Spring

**Software** Docker, Git, Microsoft Office, Vagrant

**Other** Ansible, AWS, Linux, Server management

## Leadership

**Leadership Team Member and Field Technical Advisor**

Nov. 2014-Present

FIRST Tech Challenge, Chicago, IL

- Plan robotics tournaments and technology training as part of Illinois FIRST Tech Challenge Leadership Team
- Direct technical aspects of FIRST Tech Challenge robotics tournaments

## Honors and Awards

**ACM/ICPC Mid-Central Regional Qualifier**

May 2015, May 2016

- Advanced two times from University of Chicago contest in team-based programming competition

**Google Code-in Grand Prize Winner**

Feb. 2014

- One of the winners of an international open source programming competition