

# JASON BAK

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## EDUCATION

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**Carnegie Mellon University** | B.S. in Statistics/Machine Learning  
Minors in Computer Science + Chemistry

Pittsburgh, PA  
Expected Dec '19

## EXPERIENCE - INDUSTRY

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**Intuit** | Software Engineer Intern - [Data Platforms](#)

Mountain View, CA  
Summer '19

Spring, Java, EMR, React, JavaScript, MySQL, CloudWatch

- Added EMR lifecycle functionality to a console and dashboard used by Intuit data scientists/analysts.
- Worked across teams to understand and provide solutions to EMR painpoints regarding big data analysis.

**Amazon** | Software Development Engineer Intern - [AI Labs](#)

Seattle, WA  
Summer '18

C++, Java, Python

- Implemented internal shingling of data for the Random Cut Forest (RCF) library.
- Extended an API to granularize RCF scores to provide per-dimension values.

**Fulcrum Global Technologies** | Legal Software Developer Intern - [Startup Labs](#)

Chicago, IL  
Summer '17

ASP.NET MVC, MySQL, DevExpress, MarkLogic

- Built a dynamic model of a law firm using ASP.NET Entity Framework.
- Designed and built legal dashboards using ASP.NET MVC and DevExpress.

## EXPERIENCE - ACADEMIA

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**Carnegie Mellon School of Computer Science** | Teaching Assistant

Pittsburgh, PA

Taught labs/recitations, held office hours, and graded coursework for:

ML 10-315 - Introduction to Machine Learning

Fall '19

CS 15-122 - Principles of Imperative Programming (i.e., Data Structures)

Fall '17

**Institute for Software Research** | Research Assistant - Machine Learning

Pittsburgh, PA  
Spring '18

- Wrote benchmarking tests of partitioned deep neural networks across devices.

## PROJECTS

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**Analysis of my personal journal**

[ Python, NLTK, Stanford CoreNLP, TextBlob, textgenrnn ]

Analyzed my personal journal of four years (350+ pages) to identify trends that promote happier writing, which may be correlated to a happier life!

**Knowledge graph of the 2017 political landscape**

[ Spark, Kafka, NLTK, ElasticSearch, Flask, Angular2 ]

Received overall 2nd place (\$1024) at HopHacks Spring '17

Streams news articles in real-time and tags related entities. After constructing knowledge graphs, hidden connections between businessmen, politicians, etc. are made accessible via the Nexus API and web client.

**Messenger-based political assistant bot**

[ Django, api.ai, NLTK, Microsoft Cognitive Services ]

Received APT Sponsor Award (\$600) at TartanHacks Spring '17

Provides a political news digest upon request across FB Messenger. Based on the user's interest, they can seamlessly contact their senators, donate to causes, or get involved in local activism to make a difference.

**Keyboard-based tab navigation Chrome extension**

[ JavaScript, HTML/CSS ]

Enables users to quickly navigate between tabs with highly-customizable keyboard shortcuts. Removes the need for searching through a haystack of tabs and making tabs of websites already open.

## SKILLS

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**Languages** Java · Python · C/C++ · JavaScript

**Tools & Frameworks** React · Spring · SQL · Unix · Jekyll · Git · Vim · HTML/CSS · L<sup>A</sup>T<sub>E</sub>X

**Design** Sketch/Figma · wireframing · paper prototyping · storyboarding

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**HOBBIES** daily journaling · adventure photo/videography · marathon running · urban dance