

# Nicholas Ryan

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## EDUCATION

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### Georgia Institute of Technology, Atlanta, GA,

- *Bachelor of Science in Computer Science*
- *Focus Areas: Intelligence and Theory*
- *Minor: Mathematics*
- GPA: 3.60/4.00 *Highest Honors*

May 2017

## SKILLS

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**Languages:** Java · SQL · Python

**Software/Frameworks** AWS Services (Kinesis, DynamoDB, S3, Lambda, CloudFormation) · Spring · Git · Apache Spark

**Other:** Database/Data Warehouse Design · Functional Programming · Linux · Machine Learning

## WORK

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### Software Development Engineer II

Amazon.com, Inc.

July 2017 - Present

Seattle, WA

- Recommendations for Amazon FreeTime
  - Build models based on app usage to recommend new content for children using AB Testing to evaluate new models
  - Work closely with ML Scientists to construct new evaluation metrics to speed up our model testing process
- Manage real-time data pipeline to handle all business and performance metrics within the FreeTime infrastructure
  - Clients provide 'Contract Packages' which define validation and transformations to be applied on their incoming data which allows onboarding new clients with no code changes
  - Data pipeline is integrated with above recommendation systems allowing all incoming data across platforms to be included in recommendations if deemed appropriate

### Teaching Assistant

Georgia Tech College of Computing

January 2016 - May 2017

Atlanta, GA

- Assist with CS 1331, the focus of this course is Object-Oriented Programming with Java
  - Lead hour and a half recitation, with another TA, once a week to reinforce lecture topics
  - Write and grade homework assignments as well as grade exams

### Software Development Intern

Amazon.com, Inc.

May 2016 - August 2016

Seattle, WA

- Android development for Amazon Kindle FreeTime
  - Implement a new customizable wallpaper feature from front-end to back-end
  - Extensive testing at unit, UI, and service-side level

### Research Assistant

Georgia Tech Program Analysis Group - Trustable Programming Group

January 2015 - May 2016

Atlanta, GA

- Program Analysis Based on Automatic Theorem Proving and Automata under Dr. William Harris
  - Primary focus on program equivalence checking through logical interpolation and indistinguishable equivalence
  - Manage benchmark collection and testing

### Software Development Intern

Epic Systems

May 2015 - August 2015

Verona, WI

- Design Web Application and Database for Medical Location Data
  - Streaming Geocoding solution for continuous data processing by utilizing Apache Storm to pull data from a SQL Database, process the data, and pass to our web application
  - SQL and JavaScript features focusing on user experience for medical and financial analysis given current clinic locations and surrounding area data

## LEADERSHIP/ACTIVITIES

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- Georgia Tech Men's Ultimate Frisbee Club, August 2012 - May 2017  
President/Captain: June 2015 - May 2017  
Manage team and plan and execute practices. Dedicate 10-15 hours a week.