

# 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: 3.56/4.00 *Dean's List*

*Expected Graduation May 2017*

## SKILLS

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**Languages:** Java · Python · SQL · Javascript · C

**Software/Frameworks** Git · L<sup>A</sup>T<sub>E</sub>X · Apache Storm · Dagger

**Other:** Linux · Algorithm Design and Analysis · Machine Learning · Database Design

## PROJECTS

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- **Intelligent Graph Search - Python**  
Implement advanced graph search algorithms to instruct an artificial intelligent agent to solve various mazes
- **Multi-Threaded OS Scheduler - C**  
Schedule OS resources to minimize wait across tasks via FIFO, Round Robin, and Priority Queue techniques
- **Database Application - Java**  
Design and implementation of a library database system to manage all book and fee operations

## WORK

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**Teaching Assistant**

January 2016 - Present

*Georgia Tech College of Computing*

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**

May 2016 - August 2016

*Amazon.com, Inc.*

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**

January 2015 - May 2016

*Georgia Tech Program Analysis Group - Trustable Programming Group*

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**

May 2015 - August 2015

*Epic Systems*

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

**Tutor**

August 2015 - December 2015

*Georgia Tech College of Computing*

Atlanta, GA

- One-on-One student instruction to explain concepts in Intro to Object Oriented Programming, Data Structures and Algorithms, and Computer Organization and Programming

## LEADERSHIP/ACTIVITIES

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