Nicholas Ryan

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EDUCATION

Georgia Institute of Technology, Atlanta, GA
- *Bachelor of Science in Computer Science*   *Expected Graduation May 2017*
- *Focus Areas: Intelligence and Theory*
- *Minor: Mathematics*
- GPA: 3.48/4.00 *Deans List*

SKILLS

Languages: Java · Python · SQL · Javascript · C

Software/Frameworks: Git · LaTeX · Apache Storm · Microsoft's iZ3

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

PROJECTS

- 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 time 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

EXPERIENCE

Software Development Intern   Summer 2016
Amazon.com, Inc.

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 grading exams

Research Assistant   January 2015 - Present
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, via iZ3, 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
    - Utilized Apache Storm to pull data from a SQL Database, process the data continuously via Esri ArcGIS, 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

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