# Yashas Manjunatha

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#### **EDUCATION**

Duke University, Durham, NC

**Expected May 2020** 

Intended Bachelor of Science in Computer Science Intended Bachelor of Science in Mathematics

**Texas Academy of Mathematics and Science,** Denton, TX *Dual Enrollment Program at University of North Texas* 

May 2016

- Cumulative GPA: 4.0/4.0
- Selected Courses: Financial Mathematics, Abstract Algebra, Real Analysis I, Differential Equations, Linear Algebra, and Applied Statistics

# TECHNICAL SKILLS

**Programming/Languages:** C++; Java; Perl; Python; MySQL; HTML/CSS; LaTEX **Software:** MATLAB; Oracle; MS Office Suite (Word, Excel, PowerPoint); GIMP

## RESEARCH EXPERIENCE

**DEPT. OF MATERIALS SCIENCE AND ENGINEERING,** *University of North Texas Research Assistant* 

**Denton, TX** April 2015 - May 2016

- Conducted a computational chemistry study on the crystal structure and mechanical, elastic & electronic properties of AlMgB, with Density Functional Theory calculation
- Synthesized thick coatings of this material with a novel Laser Surface Alloying modification technique

**DEPARTMENT OF PHYSICS,** University of North Texas

Denton, TX

Research Assistant

October 2014 - March 2015

- Conducted a biophysics study on the optical properties of the chemiluminescent reaction between oxide-based probes and Nitric Oxide
- Using results from this study, developed an inexpensive and non-invasive pre-diagnostic tool (iOS Application) to test for the presence of cancer in saliva samples

SCHOOL OF BEHAVIORAL & BRAIN SCIENCES, University of Texas at Dallas

llas **Dallas, TX** June 2014 - September 2014

- Research Assistant
- Conducted a bioinformatics study to discover potential pain prevention gene targets
  Created an algorithm based on mRNA and protein expression values to determine the efficiency of gene-targeting drugs and to model side effects in various organisms

# ACTIVITIES AND LEADERSHIP EXPERIENCE

# **DUKE UNIVERSITY CHRONICLE**

Durham, NC

News Reporter

August 2016 - Present

- Report news stories for Duke's independent student newspaper
- Published articles covering university events

### TAMS RESEARCH ORGANIZATION

Denton, TX

Competitions Director

August 2014 - May 2016

- Organized and prepared TAMS students for research-related competitions
- Created a Scientific Review Committee for TAMS research projects
- Recognized for Outstanding Servant Leadership

# ASPIRE EXPOSITION AND MENTORSHIP VOLUNTEER PROGRAMS

Denton, TX

Competitions Director

August 2014 - May 2016

- Organized local outreach programs to inspire elementary & middle school students in STEM fields and research
- Organized the annual Aspire Science Fair and Aspire Field Day
- Awarded \$3000 grant from the Society for Science & the Public