

# Justin Goodman

📍 College Park, MD

📧 @jugoodma

</> justgood.dev

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## Education

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**University of Maryland**  
*College Park, MD*  
August 2016 – May 2020

B.S. Computer Science (Department Honors)  
B.S. Mathematics  
Honors College – *University Honors Program*  
GPA: 3.945  
Magna Cum Laude  
Selected coursework:

Advanced Algorithms	Statistics
Artificial Intelligence	Number Theory
Advanced Data Structures	Advanced Calculus
Human-Computer Interaction	Linear Algebra
Game Programming	Numerical Computational Methods
*Distributed Cloud-Based File Systems	Cryptology
Compilers	Abstract Algebra

\* Graduate-level course

**University of Maryland**  
*College Park, MD*  
August 2020 – May 2021

(expected) M.S. Computer Science

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## Teaching

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**CMSC389B**  
*University of Maryland*  
Fall 2020

A TOUR OF PROGRAMMING LANGUAGES  
STIC (Student Initiated Course) Co-Facilitator

**CMSC434**  
*University of Maryland*  
Spring 2020

INTRODUCTION TO HUMAN-COMPUTER INTERACTION  
Grading TA

**CMSC388L**  
*University of Maryland*  
Fall 2019 – Spring 2020

READINGS IN HCI RESEARCH  
STIC (Student Initiated Course) Co-Facilitator

**CMSC250**  
*University of Maryland*  
Five Semesters

DISCRETE STRUCTURES  
Head/Teaching TA (Spring 2019, Fall 2019, Fall 2020)  
Teaching TA (Spring 2018, Fall 2018)

**CMSC131**  
*University of Maryland*  
Fall 2017

OBJECT-ORIENTED PROGRAMMING I  
Grading TA

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## Research

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**Undergraduate Thesis**  
*University of Maryland*  
Spring 2020

**‘What Twitter Knows’ Extension – Dataset Exploratory Analysis**  
Advisor: Dr. Michelle Mazurek

**Paper**  
*USENIX Security 2020*

**What Twitter Knows: Characterizing Ad Targeting Practices, User Perceptions, and Ad Explanations Through Users’ Own Twitter Data**  
Miranda Wei, Madison Stamos, Sophie Veys, Nathan Reiting, Justin Goodman, Margot Herman, Dorota Filipczuk, Ben Weinshel, Michelle L. Mazurek, Blase Ur  
29<sup>th</sup> USENIX Security Symposium, 2020

**Twitter Transparency**  
*University of Maryland*  
January – October 2019

In collaboration with SUPERGroup at the University of Chicago.  
Mentors: Dr. Michelle Mazurek, Dr. Blase Ur

- Studied users’ perceptions towards Twitter advertising
- Contributed to data collection and survey generation system

**Big Data REU**  
*University of Chicago / IIT*  
*Chicago, IL*  
May – August 2019

BigDataX: From theory to practice in Big Data computing at eXtreme scales  
Mentor: Dr. Kyle Hale

- Worked on addressing space theory in HExSA lab
- Created novel process dynamics visualization techniques

**Poster**  
*CVPR 2019*

**Audio-Visual Interpretable and Controllable Video Captioning**  
Yapeng Tian, Chenxiao Guan, Justin Goodman, Marc Moore, and Chenliang Xu  
(paper accepted as poster)  
CVPR Sight and Sound Workshop, 2019

**Computer Vision REU**  
*University of Rochester*  
*Rochester, NY*  
May – July 2018

Computational Methods for Music, Media, and Minds  
Mentor: Dr. Chenliang Xu

- Created novel Amazon MTurk interfaces to build three datasets for training computer vision models
- Earned Deans’ Citation for Broadening Research Involvement

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## Industry

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### Software Developer, Graduate

*Raytheon BBN Technologies*

*Arlington, VA*

June – August 2020

- Collaborated with team to enhance micro-service system registry
- Learned advanced SOA (service-oriented architecture) design, Docker, Kubernetes, Agile software development, and Node.js (React, Meteor)

### Web Development Full Time

*D3Corp*

*Ocean City, MD*

May – August 2017

- Collaborated with team to design and build websites for commercial enterprises
- Contributed to over 100 websites
- Learned advanced techniques for WordPress, Jekyll/Liquid, Linux server implementation/maintenance, Google Analytics/Tags, and Facebook Pixel

### Web Development Internship

*D3Corp*

*Ocean City, MD*

June – August 2016

- Collaborated with team to design webpages for commercial enterprises and increase visibility through search engine optimization
- Contributed to over 100 websites
- Learned how to use WordPress and content management systems for building websites

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## Projects

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*Projects available on [GitHub](#) or upon request*

### Behavioral Research App

*University of California*

*San Diego, CA*

August 2017

Developed Android app for Behavioral Economics researchers at UCSD  
Used Android Studio, along with Google Firebase Authentication/Database, and FitBit API to log participants' sleep time

### Personal Home Linux Server

*Salisbury, MD*

June 2017

(still maintained) Converted an old computer into a UNIX-based web server (Ubuntu Server, NGINX, PHP, MariaDB)  
Currently hosting: [ironprofessor.com](#)  
Set up SSH key-based authentication and forced-HTTPS protocol  
Migrated server to Raspberry Pi  
Hooked up UPS – server sends text-message updates

### DataLeague Hackathon

*University of Maryland*

*College Park, MD*

November 2016

Placed 2<sup>nd</sup> overall  
Collaborators: Clifford Bakalian, James Gu  
Designed a model for estimating the likelihood that an airborne illness will survive and affect a population  
Integrated APIs from Weather Underground, Air Now AQI, Google Maps, and the US Census Bureau

## Class Projects

*University of Maryland*

Wide array of projects including/involving:

- Principles of OOP (Java)
- Systems (C)
- Lexing/Parsing (OCaml)
- Web Security (Ruby)
- AI (Python)
- User Interfaces (web)
- Advanced Data Structures
  - AVL Trees
  - Patricia Tries
  - KDTrees
  - PRQuadTrees
- Distributed Systems (Go)

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## Organizations

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### Dept. of Computer Science Education Committee

*University of Maryland*

*College Park, MD*

Fall 2018 – Spring 2020

Undergraduate representative

### UMD Cycling Club

*University of Maryland*

*College Park, MD*

Marketing Coordinator (June – Dec 2017)

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## Accomplishments

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### Best Undergraduate TA

*University of Maryland*

*College Park, MD*

Fall 2017 – Spring 2018

Selected by the Teaching Awards Committee

*Quote: for his enthusiasm, dedication and openness. Several students noted that Justin was extremely well prepared for discussion sessions, with well designed problems and examples that illuminated difficult concepts.*

### Eagle Scout

*Salisbury, MD*

August 2015

Project: cleared out overgrowth in 350ft × 10ft creek (mill race) at Furnace Town Living Heritage Museum. I try and check back each summer – the overgrowth is still gone!