

Justin Goodman

📍 College Park, MD

📧 @jugoodma

</> justgood.dev

Education

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

GPA: 4.0

Coursework:

Empirical Research Methods
Decision-Making for Robotics
Wireless and Mobile Systems for the IoT

Teaching

Evaluations available upon request

CMSC389B
University of Maryland
Fall 2020 – Spring 2021

A TOUR OF PROGRAMMING LANGUAGES
STIC (Student Initiated Course) Co-Facilitator
<https://github.com/plstic>

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
Six Semesters

DISCRETE STRUCTURES
Head/Teaching TA (Spring 2019, Fall 2019, Fall 2020, Spring 2021)
Teaching TA (Spring 2018, Fall 2018)

CMSC131
University of Maryland
Fall 2017

OBJECT-ORIENTED PROGRAMMING I
Grading TA

Research

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

29th 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

Industry

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

School Projects

Projects available on GitHub or upon request

Graduate Class Projects

University of Maryland

Advanced projects including:

- User study (recreation) in smartphone-sharing tendencies
 - IoT sonic localization
 - Budget-constrained robot mapping
- [jugoodma/can-borrow](#), [jugoodma/818bw-project](#)

Undergrad 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)

Personal Projects

Projects available on GitHub or upon request

GPSRace

Summer 2020

Developed initial front-end and back-end for cloud-based GPS comparison tool. This was created during the COVID-19 pandemic as a means for cyclists to “race” solo, yet still compare times. gpsrace.cc

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, justgood.dev
- Set up SSH key-based authentication and forced-HTTPS protocol
- Migrated server to Raspberry Pi (3B+)
- Hooked up UPS (Uninterruptible Power Supply) – server sends text-message updates

DataLeague Hackathon

University of Maryland

College Park, MD

November 2016

Placed 2nd 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

Organizations

Dept. of Computer Science Undergraduate representative
Education Committee
University of Maryland
College Park, MD
Fall 2018 – Spring 2020

UMD Cycling Club Marketing Coordinator (June – Dec 2017)
University of Maryland
College Park, MD

Accomplishments

Best Undergraduate TA Selected by the Teaching Awards Committee
University of Maryland 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.*
College Park, MD
Fall 2017 – Spring 2018

Eagle Scout Project: cleared out overgrowth in 350ft × 10ft creek (mill race) at Furnace
Salisbury, MD Town Living Heritage Museum. I try and check back each summer – the
August 2015 overgrowth is still gone!

Things I Like

Normal Human Things writing (especially in \LaTeX), making music, learning, cooking, cycling, swimming, running, advocating for wearing sunscreen, working on difficult problems, studying math until my brain hurts, cracking dumb jokes with my friends, and playing video games
I like coding too!