SANNA MADAN

COMPUTER SCIENCE

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Skills

COMPUTER

Python
R
C++
C
Unix
Shell Scripting
Java
Arduino
HTML/CSS
Perl
Microsoft Office
SQL

RESEARCH

Cancer genomics
Bioinformatics
Genetics
Data science
Graph theory
Machine learning
Publication writing
Public speaking
Monte Carlo Simulation

Education

University of Maryland, College Park
B.S. Computer Science 2020

Honors College - Banneker/Key Full Scholarship

Employment/Work

National Cancer Institute - Cancer Data Science Lab
Cancer Research Training Award Fellow, Dr. Eytan Ruppin

Bethesda, MD
Jan 2018 to Current

Computationally analyzing cancer omics laboratory and patient data. Developing machine learning predictors to make translational, clinical insights into effectiveness of therapies.

UMD - Center for Bioinformatics and Computational Biology
Undergraduate Research Assistant, Dr. Eytan Ruppin

College Park, MD
Aug 2016 to Current

Computational analysis of large-scale oncology data, particularly genomics and immunotherapy.

NIH - National Center for Biotechnology Information
Summer Internship Program (2015 & 2016), Dr. Teresa Przytycka

Bethesda, MD
Jun 2015 to Nov 2016

*Developed novel strategy to predict cancer-driving mutations and pathways in large-scale oncology data.
*Published in multiple peer-reviewed journals and conference proceedings.

Johns Hopkins Institute for Computational Medicine
Research Intern, Karchin Lab

Baltimore, MD
Jun 2014 to Mar 2015

*Helped develop and apply combinatorics algorithm to find coordinated genetic alterations in cancer.

National Cancer Institute
Research Intern, Dr. Sharon Savage

Rockville, MD
Sep 2012 to Sep 2013

*Analyzed genomic data for inherited cancer susceptibility genes and familial predisposition syndromes.

Other Projects

Co-Founder and CTO, Senvision LLC
Aug 2016 to Current

*Developed machine learning models predictive of stock market movement with NLP.
*Backtested, live-traded using our own money, and saw ~35% annual returns.

Undergraduate Research, Computational Physics
Sep 2016 to May 2017

*Dark matter research with machine learning and statistics. C, C++, and Python.
*Analyzed large-scale data and Monte Carlo simulations for Compact Muon Solenoid experiment at CERN.

Awards & Accomplishments

Kleiner Perkins Engineering Fellowship - Kleiner Perkins Caufield & Byers (KPCB)
Nov 2017

Selected as one of ~50 Engineering Fellows from a pool of 3000+ applicants http://kpcbfellows.com/meet-the-fellows

Forbes Under 30 Scholar - Forbes Magazine
Sep 2017

Awarded exclusive free access to the annual Forbes Under 30 Summit in Boston.

MedHacks 2017 - 1st Place in Access to Care track, 3rd Place overall - MedHacks
Sep 2017

Developed app to diagnose Parkinson's disease and severity with smartphone data and neural networks at Johns Hopkins University's premier medical hackathon.

Intel Science Talent Search Semifinalist - SSP & The Intel Foundation
Jan 2016

One of 300 semifinalists selected in the nation's most prestigious pre-college science competition.

Banneker/Key Scholar - University of Maryland, College Park
Apr 2016

Maryland's most prestigious full ride scholarship offered to the top 0.5% of applicants.

Peer-reviewed Journal Publications & Conference Proceedings

See https://scholar.google.com/citations?user=Ha-cwVQAAAAJ&hl=en&oi=ao for full list.

Aspirations in Computing Award, National Runner-Up - NCWIT
Dec 2015

National Center for Women in Technology - for demonstrated interest and achievements in computing, proven leadership ability, academic performance, and plans for post–secondary education.