# Ashmita Rajkumar

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#### **EDUCATION**

Vanderbilt University Nashville, TN

B.S. Computer Science, Minor Engineering Management

GPA: 3.91

Coursework: Data Structures, Intermediate Software Design, Algorithms, Operating Systems, Programming Languages, Project Management, Systems Engineering

## WORK EXPERIENCE

San Francisco, CA Gap Inc.

Software Engineering Intern

Summer 2021

Expected Graduation: 2022

Developed application interface in Workforce Activity Manager Application for Gap Inc. retail stores via Swift and Java

# Medical Image Analysis and Statistical Interpretation (MASI) Lab

Research Assistant

January 2021 - Present

Discovered innovative deep learning algorithms using Python to immediately process CT scans to identify liver disease with 99% accuracy

## Schneider Downs & Co. Inc.

Cyber Security Intern

Pittsburgh, PA Summer 2020

Nashville, TN

- Streamlined the reconnaissance process using Kali Linux, Recon-ng, Website scrapers, Nessus, OWASP ZAP and NMaps to assess network strength and perform thorough port scans to gain access to corporate networks and infrastructures
- Created and deployed phishing campaigns using company's internal tool RedLure

#### **NASA Ames Research Center**

readable sets of data

Data Analysis Intern

Moffett Field, CA Summer 2019

Examined and extracted data from all United Nations member countries' medical requirements for space exploration and determined the discrepancies in medical protocols across an international apparatus using MySQL databases

# University of Pittsburgh Project Tycho

Research Assistant

Pittsburgh, PA

- August 2018 June 2019 Sorted through database with infectious disease data from Central America to help generate standardized and machine
- Developed an innovative algorithm for automated parsing through big data regarding outbreaks in communities around the world

# **PROJECTS**

SANP

April 2021 – Present

- Built a spatial awareness navigation planner in Swift that alerts users of events with geospatial consideration August 2020 – December 2020 acME
- Developed a machine learning based Android application that analyzes users' photos and provides a differential diagnosis of the skin pathology

WeShop

May 2020 - November 2020

- Created a platform using ReactJS, Firebase, and Python to connect elderly users to shoppers during the Covid-19 pandemic MedHack January 2016 – January 2020
- Engineered a preventative solution to personal and enterprise network intrusion detection using Java
- Designed a novel method to index the operating system level files using MD5 hash values

### RELEVANT SKILLS

Skills: C++, Swift, Java, C Programming, Python, Kali Linux, Javascript, Html/CSS

#### **PUBLICATIONS**

A. Rajkumar "Human Emotion Assessment Based on Physiological Data Using Semiotic Analysis" US Patent Application Number: 20170042463

- A. Raikumar, "Human Health Risk Assessment of Space Radiation," SAE AeroTech Americas 2020.
- A. Rajkumar, "Prediction of Diabetes Progression Using Statistical Analysis," IEEE BIBM 2019 ISBN: 978-1-7281-1866-6.
- A. Rajkumar, "The Effect of the Indian Social Structure on the Perception and Development of Bharatanatyam," Forbes & Fifth.

#### LEADERSHIP EXPERIENCE

# Vanderbilt University College of Engineering V^2 Mentor

Ambassador July 2021 – Present

• Assisted first year engineering students with their transition to Vanderbilt by offering resources, peer, and group support during orientation and the academic year

# **South Asian Malaria Foundation**

President January 2014 – Present

- Founded an organization that promotes global medical advocacy and raised over \$4000 in grant money
- Provided preventative measures and spread awareness against malaria to nearly 5000 orphans in Southern Asia transmitted **Hack412** Pittsburgh, PA

Sponsorship and Finance Chair

**Pittsburgh, PA** *June* 2020 – *August* 2020

 Forged relationships and raised funds from companies in the Greater Pittsburgh area to spread awareness about different technologies in the industry

University of Pittsburgh

Pittsburgh, PA

Resident Assistant

April 2019 – August 2020

- Cultivated a safe space for residents and fostered a community and leadership within the building
- Planned and budgeted for events up to 200 students while ensuring student safety

#### **AWARDS**

Grace Hopper Merit Based Scholarship Recipient	June 2021
Gap Inc. Exceed Award	June 2021
Gap Inc. Innovation Day Best UI/UX Winner	June 2021
Gap Inc. Innovation Day Overall Challenge Project Winner	June 2021
Pangea.app Top Emerging Talent Award	June 2021
Six Term Dean's Honor List	May 2021
Alpha Vantage Hackathon Judges Pick Award	June 2020
Ryerson University Hackathon Special Award	May 2020
Wolfram Alpha Challenge Prize	May 2020
Browne Fellowship Recipient	November 2019
Intel ISEF Alternate with Reimbursed Trip to California State Science Fair	April 2017
MIT Inspire National Finalist	April 2016
National JSHS Symposium Two Time National Semifinalist	February 2016
NASA Conrad Challenge Two Time National Semifinalist	April 2016
Association for Computing Machinery \$200 Special Award	April 2016