

Priyanka Kargupta

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SUMMARY

Passionate and hard-working undergraduate constantly seeking to continue learning and evolving knowledge of computer science and mathematics. Particularly interested in machine learning and artificial intelligence. Programs in Java, Python, Javascript, and HTML/CSS with five years of experience.

EDUCATION

2018 - 2022: University of California, Berkeley (Intended Computer Science)

2014 - 2018: Mount Hebron High School, Ellicott City, MD
Weighted GPA: 4.61 (Top 5%; 18/373)
New SAT (6/3/2017): 1520/1600 (ERW: 730; Math: 790)
PSAT: 1460/1520 (Commended)
Math II SAT Subject Test: 790

CLASSES

Structure and Interpretation of Computer Programs (CS61A), Designing Information Devices and Systems I (EE16A), Differential Equations Gifted/Talented (G/T), AP Multivariate Calculus/Calculus C, AP Calculus AB, AP Physics C: Mechanics, AP Chemistry, AP Computer Science A, AP Macroeconomics, AP Spanish Language, Advanced Data Structures G/T, Advanced Object-Oriented Design G/T

SKILLS

Java, Python, Javascript, Android Development, C++, R, HTML5, Cascading Style Sheets, Adobe Photoshop, MySQL, ASP.NET, Scheme, Linux, AWS, Camtasia, Microsoft Office

Examples of projects:

Complete web development of www.agnik.com, www.vyncs.com, www.tecanal.org,
www.vyncsmls.com
<https://github.com/pkargupta>

- LODA (Android): <http://tinyurl.com/hl9g6yh>
- Zalez (Android): <http://tinyurl.com/h7u992d>

EXPERIENCE

Data Sciences Intern, Intelligent Systems Division- NASA Ames Research Center (Summer 2017)

Design and implement machine learning algorithms for deep image classification for swarms of drones in loosely coupled environments. Researched distributed deep neural network learning algorithms for loosely-coupled systems and wrote a paper on "Self Similarity, Contraction Mappings, and Distributed Deep Learning of Neural Networks" (enclosed), which is in communication for publication. Algorithms implemented using AWS EC2 Accelerated Computing Linux instances and Caffe (Python and C++).

Machine Learning/Data Science Intern- Agnik (2016 – Present)

Developed machine learning & data science algorithms and applications for Agnik's connected car and IoT applications (i.e. deep image classification for car damage recognition, onboard embedded device pixel segmentation) and implemented in Python and C++.

Machine Learning Developer- Agnik (2014 – Present)

Full-time during summer and part-time during the school year. Develop web and mobile applications for Agnik as well as web pages, graphics, and videos. Assist in researching various technologies (i.e. Bluetooth BLE beacons) and applying it to Agnik's current connected car and IoT technologies with Java (Android development), JavaScript, Photoshop, and HTML/CSS.

Chief Technology Officer- TeCanal (2017 – Present)

Regularly teach computer science and STEM basics to children in Baltimore lacking technological resources and education. Develop software/web applications to assist with teaching and volunteers. Design new curricula for robotics, app development, Java/Python programming, and etc. Serve on the Executive Board to make decisions regarding the future and expansion of the technology education and

resources of the organization in both the Maryland, Massachusetts, and New Jersey branches.

President- Computer Science Club (2016 – Present)

First female president in the history of the club. Lead executive board in developing Java, machine learning, web/app development, & cybersecurity curricula for 70+ members. Worked with girl coding clubs to allow more women to join and excel in male-dominated environments.

Co-Lead Organizer, Director of Technology- QuHacks (2017 – Present)

Help lead a team to organize hackathons for 100+ students in order to create opportunities for them to network, create, develop, and learn new concepts involving computer science. Lead Android development workshops and manage all technology during hackathons. Manage a group of seven in organizing the hackathon.

Regional Director- coderGirls (2017 – Present)

Organize and coordinate after school program for young middle school girls to learn about various areas in computer science and programming in Java and HTML5. This is under coderGirls, a national nonprofit organization that works towards promoting computer science among young women by dismantling negative stereotypes around field.

Co-Founder, Chief Technology Officer- Medley (2016 – 2017)

Formed an all women-run business for products geared towards celebration of diversity and lead a team of girls in using software to develop the product design, webpages, videos, and marketing graphics. Profits were donated to the Howard County Food Bank. Served as a Member of the Senior Leadership Team which led Medley in winning the JA Central Maryland Company of the Year and National Top 15 Company Awards. Proclamation of Success presented to Medley by County Executive, Allan Kittleman.

Volunteer Software Development and Maintenance (2015 - Present)

Assist teachers and staff at Mt. Hebron High School with web and android app development. Leader of a team of students developing a county-wide web/mobile application for smart counselor and student meeting signups, replacing the current paper-based system.

HONORS AND AWARDS

2017 National Top 15 Company

Medley (see “Experience”) received national recognition as one of top fifteen youth-run companies to attend the National Student Leadership Conference held on Capitol Hill, selected from the hundreds of companies that applied nationwide.

2017 JA Maryland Company of the Year

Medley (see “Experience”) received statewide/regional recognition as the top youth-run company in Central Maryland. A proclamation of success was presented to Medley by the Howard County Executive, Allan Kittleman.

Congressional App Challenge District Champion 2016

Developed an Android application which allows users to receive information of a random restaurant based on GPS location through the Yelp Search API and matrices for the spinner implementation.

<http://www.congressionalappchallenge.us/2016-winners/>

2016 QuHacks Winner: 1st Place

Winner of the QuHacks Hackathon hosted at the John Hopkins Applied Physics Laboratory. Developed an application based on BLE technology and ultrasonic sounds transmitted by smartphones to detect the basic information of nearby individuals using the app. Simplifies the process of making useful business and personal connections, especially at large-scale events.

2018 National Center for Women and Information Technology: 2018 Honorable Mention Award for Aspirations in Computing

Designation for the top 10% of applicants. Selected based on merit and experiences with computing.

2018 Maryland Affiliate Winner of the NCWIT Award for Aspirations in Computing

Selected based on merit and experiences with computing.

2016 Mock Trial County Champions, Howard County Bar Association

Competed in a county-wide competition for Mock Trial and became co-champions.

2015, 2016 National Spanish Exam Gold Medalist, AATSP

Two-time gold medalist (highest level) for the National Spanish Exam

AP Scholar Award with Distinction

Received a score of 5 on AP exams taken, which include Computer Science A, Calculus AB, Calculus BC, and United States Government and Politics

EXTRACURRICULARS

Mount Hebron Computer Science Club (President), Spanish National Honor Society (Leader), National Honor Society, National Math Honor Society, Mock Trial, Math Team, Future Business Leaders of America, Junior Achievement Rising Women, Varsity Tennis Team