

# Yash Vardhan Goenka

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## EDUCATION

### UC BERKELEY

#### BS IN COMPUTER SCIENCE AND ENGINEERING

Expected Dec 2019 | Berkeley, CA  
College of Engineering

### CALCUTTA INTERNATIONAL SCHOOL

Kolkata, India

[Took gap year after high school]

## UNDERGRADUATE

### COURSEWORK

#### FRESHMAN AND SOPHOMORE YEAR

CS 61A & 61B - Abstraction, Data Structures and Algorithms  
CS 70 - Discrete Math  
CS 61C - Machine Structures/Architecture Math 54 - Linear Algebra and Diff Eq  
Math 53 - Multivariable Calculus  
Physics 7A & 7B - Mechanics and Wave Motion; Heat, Electricity, and Magnetism  
EE 16A - Designing Information Devices and Systems

### EXTRA CURRICULAR

#### CLUBS AND SOCIETIES

The House - Incubator  
Sigma Eta Pi - Entrepreneurship Fraternity  
Space Enterprise Berkeley  
Berkeley Hyperloop  
Neurotech at Berkeley  
Effective Altruism  
Alpha Kappa Lambda

## LINKS

LinkedIn:// yashvg  
HackerRank:// yvg95  
Github:// yashgoenka

## SKILLS

### PROGRAMMING

Fluent:

Java • Python • Javascript

Comfortable:

Django • Node.js • SQL  
MongoDB • Ruby

Familiar:

iOS • Matlab • React • C

## EXPERIENCE

### FREE VENTURES | STARTUP ACCELERATOR

September 2016 - Present | Berkeley, California

- Received funding, working space and mentorship from experts in industry, startup founders and VCs. Pitched to Sequoia Capital and Greylock Partners.
- Find out more at [freeventures.org](http://freeventures.org)

### SHAPES NOT COLORS | IOS APP ON APP STORE

Feb - March 2015 | Kolkata, India

- Coded, Designed and Published a simple, tough yet addictive game
- Free Download on iOS App Store ([bit.ly/shapesnotcolors](http://bit.ly/shapesnotcolors))

## RESEARCH & PROJECTS

### IRIS BCI: TALK USING BRAIN WAVES | CO-FOUNDER

March 2016 - Present | Berkeley, California

- Device allows people to talk using a headset using their brain waves
- Marketed to disabled individuals with Locked-In Syndrome
- It is 10 times faster than current solutions; and about 20 times less costly

### PROJECT KARMAN: EUREKA-1 ROCKET | AVIONICS ENGINEER

August 2017 - Present | Space Enterprise at Berkeley

- Working towards becoming the first undergraduate team in history to fund, build, and launch a rocket into space (surpasses 100-km altitude)
- Part of Design, Recovery and Avionics teams
- Designing the software and hardware that allows Eureka-1 to communicate with the ground, determine its position in space, modify its flight, and coordinate the timing of key events such as engine ignition, payload separation, and parachute deployment.
- Also tasked with ensuring the nose cone, avionics bay, payload, and associated equipment returns to Earth's surface at a safe velocity, bringing the speed of the returning payload from Mach 2 down to a gentle 3 m/s (6.7 mph).

### BERKELEY HYPERLOOP | SYSTEMS AND CONTROL ENGINEER

August 2017 - Present | Berkeley, California

- Developed systems and control for Acceleration, Braking and Levitation Rig
- Leading screw actuation and obtained data on forces in order to spec motor requirements
- Abstracted data coming in from sensors and designed test procedures

### GRAPHENE SUPERCAPACITOR | PRIVATE RESEARCH

March 2014 - August 2015 | Kolkata, India | Ahmedabad, India

- Built new energy storage device that can charge a phone in 12s
- Developed novel patented method to reduce graphene oxide to graphene
- Funded by National Innovation Foundation and Indian Institute of Management

## AWARDS AND RECOGNITION

2015	top15/5million	Silver Award in Intel Internat. Science and Eng. Fair (India)
2014	top27/25000	Nation Innovation Foundation IGNITE Award
2014	Provisional patent	By Dept of Sci & Tech, India - Patent No.1179/KOL/2014