

# Bikram Nandy

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## EDUCATION

### University of California, Santa Barbara (UCSB)

June 2020

Bachelor of Science, Computer Engineering

Engineering Dean's Honors 2019-2020

**Relevant Coursework:** • Data Structures/Algorithms • Computer Networks • Artificial Intelligence/Machine Learning • Object Oriented Design • Computer Architecture • OS • Android Dev • Computer Security • Front-End Dev (HCI)

## SKILLS

- **6 years of programming experience**
- Expert: Javascript (React, Node), Java, Python, HTML/CSS/Bootstrap, C/C++, Git, Agile SD, Databases (SQL & NoSQL), PHP
- Familiar: Kotlin, AWS, Ruby, Cypress (JS), MATLAB, FPGAs, Verilog, MIPS Assembly

## EXPERIENCE

### Software Engineering Intern (Full-Stack Developer) | Praevium Research

Mar. 2019 – Mar. 2020

- Engineered 4 web applications from the ground up for company that designs & fabricates semiconductor lasers
- Utilized Model-View-Controller framework including Javascript, PHP, HTML/CSS, Bootstrap, various APIs, and SQL to design databases and UX/UI for graphical visualization of hardware data
- Developed an application in Python to communicate with field instruments and industrial devices over a network
- Made end-to-end laser design process more efficient by building RESTful APIs in PHP for 2 web applications
- Set clean code standards in code reviews and enhanced site performance by cleaning up inefficient Javascript/PHP

### Software Q.A. Engineer | UCSB Graduate Division

June 2017 – Dec. 2017

- Verified backend software for financial aid distribution for UCSB Graduate Division through rigorous, precise tests using in-house ProSAM software

## PROJECTS

### BestFaceForward | 2<sup>nd</sup> Place CS Capstone | [github.com/biknandy/No-Cap-Stone](https://github.com/biknandy/No-Cap-Stone)

Sept. 2019 – May 2020

- Worked with 4 classmates and mentors from LogMeIn to build an online interview platform that helps the inexperienced candidate learn how to improve communication skills
- Developed algorithm to quantify live video/audio/text analysis from Google Vision and IBM Watson APIs in a Node.js backend server during a practice interview session to score a user's engagement
- Implemented and composed entire frontend infrastructure using React JS
- Technologies: React JS, Node.js, Express, AWS DynamoDB, IBM Watson, Google Cloud Vision, and Agile SD

### BFOM Website | Design Project | [brothasfom.org](https://brothasfom.org)

June 2019

- Single-handedly designed and created visually stunning, mobile-first, and fully responsive website for my BFOM Acappella singing group from scratch using JavaScript, HTML, CSS, and Bootstrap

### Toon Image | Computer Vision | [github.com/biknandy/CartoonImageStylingPython](https://github.com/biknandy/CartoonImageStylingPython)

June 2019

- Formulated Python algorithm to transform an image into its cartoon style using adaptive thresholding, color manipulation, edge detection, and k-means clustering

### textdit | SB Hacks | [devpost.com/software/textdit](https://devpost.com/software/textdit)

Jan. 2019

- Worked with 2 partners to create a Python-based service that allows users to text a number and reply with a post from reddit instantly to their phone through SMS/MMS without internet using Twilio and Google Cloud Vision APIs
- Personally built text/image recognition to ensure delivery of relevant content to the user

### CRIB | SB Hacks | [devpost.com/software/crib](https://devpost.com/software/crib)

Feb. 2017

- Coded JavaScript network infrastructure for an iOS app using the IBM Watson IoT platform on Bluemix to remotely control home appliances, simulated by Intel Edisons, LEDs, LCDs, sensors, and motors