# Vikram Kher

COMPUTER SCIENCE | APPLIED MATH

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## Education

**University of Southern California - Viterbi School of Engineering**  *Los Angeles, CA*
BACHELOR OF SCIENCE IN COMPUTER SCIENCE & BACHELOR OF ARTS IN APPLIED MATHEMATICS  *August 2018 - PRESENT*
- GPA: 4.0/4.0
- Dean's List (2018-2019)
- Expected Graduation Date: May 2022

**The Overlake School**  *Seattle, WA*
HIGHSCHOOL  *August 2014 - June 2018*
- Cumlative GPA: 93/100, unweighted
- SAT: 1560/1600 | SAT Math 2: 800/800 | SAT Physics: 800/800

## Skills & Courses

**Languages**   C++ (Proficient), Python (Proficient), Java (Proficient), HTML/CSS (Proficient), JavaScript (Intermediate)

**Courses**   Principals of Software Development, Introduction to Algorithms and Theory of Computing, Data Structures and Object Oriented Design, Calculus 3, Linear Algebra, Probability Theory

## Experience

**Computation and Data Driven Discovery Lab**  *Los Angeles, CA*
VITERBI UNDERGRADUATE RESEARCHER  *May 2020 - Present*
- Developed predictive modeling systems to determine ICU outcomes for COVID-19 patients
- Conducted exploratory data analysis with data sparsity matrices, t-SNE analyses, correlation matrices

**Undergraduate Teaching Assistant - Introduction to Algorithms and Theory of Computing**  *Los Angeles, CA*
COURSE PRODUCER  *August 2020 - PRESENT*
- Holds office hours to help students understand course concepts
- Facilitates exam review sessions covering topics such as Greedy Algorithms, Dynamic Programming, and NP-Hardness

**Clari5**  *Seattle, WA*
SOFTWARE ENGINEERING INTERN (PART TIME) - FINANCIAL TECHNOLOGY COMPANY  *September 2019 - December 2019*
- Designed, implemented, and compared different string metric algorithms to reduce false-positive bank fraud alerts

## Projects

**Gladeo iOS App**
CODE THE CHANGE  *2020*
- Worked in team to develop app for career mentorship non-profit Gladeo
- Utilized Node and Express to create backend routes to handle account creation, password resetting, among other services
- Employed YouTube's APIs to enable automatic video uploading from app

**NP-Hardness in Popular Puzzle Game Baba is You**
PERSONAL  *2020*
- Worked with Theoretical Computer Science PhD student to develop reduction from 3-SAT to in-game map
- Part of an ongoing paper that will include reductions for other games

## Interests & Clubs

**Interests**   Russian Literature, Pocket Billiards, Art History

**Clubs**   Code the Change (Developer position), Association of Computing Machinery