

# SHYAMKARTHIK RAMESHBABU

(510) 648-7632 || [karthikrbabu@berkeley.edu](mailto:karthikrbabu@berkeley.edu) || LinkedIn: [www.linkedin.com/in/KarthikRameshbabu](http://www.linkedin.com/in/KarthikRameshbabu)

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## EDUCATION

### University of California, Berkeley – College of Engineering

Graduation May 2019

- B.S. Computer Science & Engineering (EECS), Sutarja Dai Center for Entrepreneurship Certification
- UC Berkeley Regent Scholar

**Coursework:** Data Structures, Algorithms, Database Systems, Techniques of Data Science, Probability & Statistics, User Interface & System Design, Technology Entrepreneurship, Security, Networking, Discrete Math, Computer Architecture, Business Admin, Linear Algebra & Differential Equations

### Moreau Catholic High School, Hayward,

Graduated May 2015

- GPA: 4.39, SAT: 2200 Honors: National Honors Society, Volleyball 1<sup>st</sup> Team All-League MVP, ASB Activities Commissioner
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## WORK EXPERIENCE

### JioSaavn, Data Science Team – Software Engineering Intern

June 2019 – Present

- Built an analytical tool to study behavior of 1M+ users to evaluate the performance of the content recommendation system
- Used PySpark and Airflow to automate NDCG & MAP metric calculations on experimental changes to a dynamic ML model

### Amazon, Self Service Performance Ads: Payments Team – Software Engineering Intern

May 2018 - Aug 2018

- Used Agile methods to build AdvancePay functionality for Amazon Marketing Service's (AMS) payment processing platform
- Designed & built a new service that provides deposit, withdraw, and correction of operation workflows to support AdvancePay
- Added testing, metrics, and data injection via Google Guice, allowing my team to deploy my service across global marketplaces

### Kaiser Permanente, Enterprise Architecture - API Strategies & Security Intern

June 2017 - Aug 2017

- Strategized and worked on building a secure API Web Services (REST) repository using IBM API Connect & DataPower
- Built a Cloud Native/Shared Services Dashboard detailing SaaS & PaaS technologies KP will use in future cloud architecture
- Made recommendations to establish a micro-service architecture to modularize pieces of the monolithic legacy codebase

### UC Berkeley- Data Science 8, Foundations of Data Science - Lab Assistant

Aug 2017 – Aug 2018

- Teaching Python & how to use NumPy, to under-grad students in weekly lab and exam review sections
- Cover topics such as Sampling, Linear Regression, Classification, and Scalable Data Processing

### The Ideal Kids (nonprofit), Public Speech Project Manager

Sep 2014 - May 2015

- Developed a 10 week course on public speaking skills, professionalism, & confidence building
  - Taught each module of the course on a weekly basis to a class of middle school students in the local community
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## PROJECT EXPERIENCE

### Kaiser Permanente– IT Internship CIO Summer Project

- Presented to KP CIO Dick Daniels on the future of KP in its campaign to make Oakland the healthiest city in America
- Built a presentation and proof of concept using predictive analytics to optimize patient's healthy eating habits & active lifestyle

### Python – Gentrification Analysis and Prediction (Machine Learning)

- Gathered data from US Census Bureau to analyze census tract features and covariates (*i.e. housing price, median salary, etc.*)
- Used Principal Component Analysis to reduce the feature set to the “k”–most relevant variables (*sci-kit learn, matplotlib*)
- Built a Logistic Regression model using binary features, that reflected percent changes, to predict if an area is highly gentrified

### Java – Autistic Children Education (Computer Vision)

- Android app to aid children in displaying their emotions, understanding social idioms, and gain confidence in themselves
- Using Microsoft Cognitive Services libraries to capture children's facial expressions, and correct them via games/ exercises
- Following the design cycle to work with end-users via the master-apprentice model, prototyped using Figma and Balsamiq

### Python – Twitter Analysis

- Worked with Twitter API to analyze Donald Trump's tweets to draw conclusions regarding his tweet behavior
  - Used Pandas to clean data & build visualizations to model the text, source, and sentiment analysis of Trump's tweets over time
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## LEADERSHIP / AFFILIATIONS

- President/Chief of Operations – South Indian Society

Feb 2016 – May 2019

- Member – Berkeley Institute of Data Science (BIDS)

Aug 2016 – May 2019

- Member – Institute of Electrical and Electronics Engineer (IEEE)

Aug 2015 – May 2019

- Director – UC Berkeley Azaad: Production & Props Design, & Dancer

Feb 2016 – May 2017

- Varsity Captain – Volleyball Team (NCS - D3 Champions 2015)

Feb 2013 – May 2015

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## SKILLS AND INTERESTS

**Technologies/Frameworks:** Proficient in Java, Python, PySpark, Pandas, NumPy, SKLearn, Matplotlib, Flask, SQL, Hive, HTML, JS, Mockito

**Software:** Git, Vim, IntelliJ, Jupyter Notebook, Android Studio, Figma, Postman, DBeaver, CyberDuck, SublimeText, Photoshop

**Interests:** Data Science, Entrepreneurship/VC, Artificial Intelligence, Machine Learning, Database Systems, Security, Volleyball, Dance