

# Madhu Krishnan

· SOFTWARE ENGINEER · BACKEND & DISTRIBUTED SYSTEMS ·

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## Education

### University of California, San Diego

Sep. 2012 - Dec. 2016

DOUBLE MAJOR

B.S. COMPUTER SCIENCE

B.S. APPLIED MATHEMATICS

- Summa Cum Laude
- Undergraduate tutor
- Tau Beta Pi Engineering Honor Society (Vice-President)

## Skills & Qualifications

**Programming** Java, Typescript, Python, Haskell, C/C++, Matlab, LaTeX

**Technologies** Docker/Podman, Kubernetes/Helm, Istio, PostgreSQL, gRPC, GraphQL, REST, Solr, Datadog, Prometheus

## Work Experience

### Uptrust

Remote, CA

SOFTWARE ENGINEER

Apr. 2021 - Jun. 2022

- TODO

### Salesforce

San Francisco, CA

SENIOR SOFTWARE ENGINEER

Mar. 2017 - Apr. 2021

- Developing and augmenting gRPC microservices to provide an enterprise-scale platform for the search query execution.

SWE INTERN (SEARCH CLOUD)

Jun. 2016 - Sep. 2016

- Improved production monitoring for home-grown A/B testing and experimentation infrastructure.

SWE INTERN (SERVICE CLOUD)

Jun. 2015 - Sep. 2015

- Implemented and tested a **reCAPTCHA** filtering service for Service Cloud's case web-forms.

### Annai Systems

Carlsbad, CA

SWE INTERN

June. 2014 - Sep. 2014

- Built and tested an encrypted high-speed transport service for genome sequencing with **OpenSSL** and **C/C++**.

## Research Experience

### Cryptographic Security of Novel Hypermedia Protocols

La Jolla, CA

UNDERGRADUATE RESEARCHER

2016

- Analyzed the cryptographic security of IPFS, a peer-to-peer distributed protocol and application suite. ([Paper](#))

### Autonomous Mapping and Navigation

San Diego, CA

UNDERGRADUATE RESEARCHER

2011 - 2013

- *Edge-based Crowd Detection from Single Image Datasets* (Published in [IJCSI](#), Vol. 12)
- *Autonomous Mapping and Navigation through Edge-based Optical Flow and Time-to-Collision* (Published in [ARPN](#), Vol. 7)

## Projects

### COMPETITIONS

2014 **3rd Place**, Facebook Hackathon (Facebook Reconnect)

Los Angeles, CA

2013 **2nd Place**, Intuit Hackathon (Triton Exchange)

San Diego, CA

2012 **2nd Place**, Intel ISEF Sweepstakes

San Diego, CA

2012 **1st Place**, Greater San Diego Science and Engineering Fair

San Diego, CA