Santa Barbara CA 93106
mohithpukale.github.io

# Mohith Pukale

(805) 570-7740
mohithrp93@gmail.com

## Education

**Santa Barbara** — **UC Santa Barbara** — **Sept 2017 – Present**
- M.S. in Computer Science GPA: 4.0

**Bangalore** — **PES Institute of Technology** — **Sep 2011 – Jun 2015**
- B.E. in Information Science Engineering GPA: 9.25 (Scale of 10)
- Selected Coursework: Computer Network & Security; Natural Language Processing; Data Mining.

## Employment

**Software Engineer** — **Amazon** — **Aug 2015 – Aug 2017**

Consumer Analytics Platform
- Re-architecture of service (including new data model & metrics) leading to 25% faster response.
- Implemented automated recovery system for big data analytic work-flows.
- Reduced operational load by 15% by breaking down monolithic service into a federated service.
- Added feature for failure and delay notification for work-flows.

**Software Engineer, Intern** — **Amazon** — **Jan 2015 – Jul 2015**
- Improved usability of portal by adding interactive graphing section, report generation feature and pagination.
- Automated aggregation of customer scores using Apache Pig and publishing using AWS workflow service.

**Software Engineer, Intern** — **Intuit** — **Jun 2014 – Aug 2014**
- Built a service to mask sensitive data to be consumed by QA Engineers.
- Reduced request time for data by 20% by moving backend for above service from MySQL to MongoDB.

## Projects

**Secure Chat** — **2015**
- Device to Device messaging web application using End-to-End Encryption (E2EE) and Graph storage.
- Layered encryption was implemented using standard protocols such as PBKDF2, RSA, AES and SHA-256.
- Android client was built easily by making using of extensible service APIs

**Sales-Rep Bot** — **2014**
- Intelligent bot to help guide customers with their queries on purchasing mobiles using NLP.
- Labeled corpus built by collecting user labeled responses and compiled using NLTK and Rule based classifier.
- Max Entropy Classifier was used to perform sentiment analysis and response was generated using scraped mobile data.

**Wireless Network Pen-Testing** — **2014**
- Performed analysis and pen-testing of wireless networks starting with basic MAC filtering and spoofing attack.
- WEP was then tested making use of numerous published attacks and utilizing aircrack-ng tool.
- WPS pin in routers was brute forced due to its weak pin verification algorithm.

**Enhancement of I2P** — **2014**
- A chat app allowing users to send messages under a pseudonym using I2P, a garlic routing protocol using overlay network.
- I2P's road-map was to upgrade their encryption standards from RSA to ElGamal. Implementation of ElGamal in the software stack was done followed by its testing and performance verification.

## Skills

- **Languages** Java, Python, C (Proficient) Ruby (Worked On) **Databases** MySQL, MongoDB
- **Experience with** AWS, Spring, Android SDK, NLTK, Hadoop, Spark

## Accomplishments

- **First Place, College Hackathon (2013):** Awarded 1st place for web application for idea titles "NotesBazaar" which was about sharing of student notes across college.
- **First Place, Deloitte Cyber Security Challenge(2014):** Awarded 1st place for cyber security challenge conducted at college level.