

## EDUCATION

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- **State University Of New York** Stony Brook, NY  
*Master of Science in Computer Science* *Aug. 2018 – Dec. 2019 (Expected)*
  - **Coursework:** Distributed Systems, Operating Systems, System Security, Analysis of Algorithms, Data Mining.
  - **Research Project:** Data-Driven monitoring of RF-Spectrum using Apache Spark and Kaa framework.
- **National Institute of Technology Karnataka** Surathkal, IN  
*Bachelor of Technology in Computer Engineering* *July. 2012 – May. 2016*
  - **Coursework:** Theory of Computation, Design and Analysis of Algorithms, Computer Architecture, Computer Networks, Operating System, Compiler Design, Database Management, Probability & Statistics.

## SKILLS

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- **Languages:** C, C++, Go, Java, Python, DistAlgo, Erlang, TLA+, Shell Scripting, HTML, CSS, PHP, Android SDK.
- **Databases:** MySQL, Datalog, MongoDB, Cassandra, PostgreSQL.   **OS:** Linux, Mac OS, FreeBSD, CentOS, Windows.
- **Other Skills:** Chord, Paxos, Raft, Dynamo, PBFT, Blockchain, File Systems, Big Data, REST, Network Protocols.

## EXPERIENCE

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- **Cisco Systems** Bangalore, IN  
*Software Engineer* *Aug. 2016 - May. 2018*
  - **Route Consistency Checker:** Developed a software product in python to investigate consistency between router's infrastructure specifications and required software set and installed it to core software team to utilize.
  - **Mac-sec Component Scoping:** Designed and documented a Hardware Abstraction Layer (HAL) to allow underlying BIOS process to communicate with system hardware at an abstract level for ASR9K platform team.
  - **Cisco 876F and Dot1x Ether-type:** Devised and enhanced a CLI for Mac-sec component according to the IEEE standards to prevent unauthorized access to shared network/LAN by configuring it over Ethernet cables.
  - **Data Delay Protection:** Advanced an API in UnixC by optimizing it to handle delayed and sniffed packets in hop-to-hop communication carrying encrypted data, a demanding feature in Mac-sec enabled interfaces.
  - **XTF Library for Mac-sec Component:** Deployed automated test cases on devices, reporting test status in official communication and collaborated with team members to progress test scripts, written in python.
- **Cisco Systems** Bangalore, IN  
*Software Engineering Intern* *May. 2015 - July. 2015*
  - **Autonomic Networking:** Integrated Autonomic networking by attesting Trusted Boot information of router namely hardware and software details to act as an extra layer of security.

## PROJECTS

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- **Secure Routing for Distributed Chord Protocol:** An extension to traditional chord protocol to support secure routing techniques such as NodeId generation and Message forwarding and analyze performance against original chord.
- **Basic Paxos Implementation::** Executed paxos algorithm as described in Lamport's paper in DistAlgo and extended it to preemption and timeout variations by identifying and addressing original liveness issues of an algorithm.
- **Correctness of Distributed Algorithms:** Verified safety, liveness and fairness and compared performance of executions of Lamport's Mutual exclusion algorithm for *any one* and *any all* specifications in DistAlgo and TLA+.
- **New York City Taxi Fare Prediction:** Trained 55 million data set and outlined a regression model to anticipate fare amount of New York City Taxi given pickup and dropoff locations and rated among top 20 percent of participants.
- **Pluggable Component to call and message using Plivo API:** Implemented a pluggable component to send SMS/make a call to a pre-specified phone number when an expectation thrown in any part of an application.

## HONOURS AND AWARDS

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- **Crackathon 2015:** Achieved runner up award in next generation open source technology competition held by Cisco.
- **SDLC Honour 2016:** Applauded with Software development life cycle award during Cisco's new hire program.
- **KSCST scholarship 2017:** Aided financially by State Government for outperforming in Major Project competition.
- **Connected.Recognition:** Bagged Cisco's honours award twice for fast and efficient completion of a project.
- **EECCMC Conference 2018:** Participated in an International Conference for Science and technology held in Chennai, India and published an IEEE paper titled, 'A Voice Interface for Controlling Hardware Devices'.