

Sandhya Chandramohan

<http://sandhyachandramohan.in>
sandhyc@uci.edu | 949.522.0190

EDUCATION

UNIVERSITY OF CALIFORNIA, IRVINE
MASTER OF COMPUTER SCIENCE
Expected Dec 2019 | Irvine, CA
GPA: 3.33/4.00

INDIAN INSTITUTE OF TECHNOLOGY, MADRAS

BACHELOR OF TECHNOLOGY
Grad. July 2014 | Chennai, India
C.GPA: 8.07/10

CERTIFICATION

CONSENSYS ACADEMY
BLOCKCHAIN DEVELOPER
Full Scholarship - Top 100/1000
Grad. Sept. 2018
Grade: 93/100

HACKATHONS

BLOCKCHAIN INDIA WEEK HACKATHON | May 2017
RUNNER-UP
Placed 2nd/15 Teams

LINKS

Github:// [s4ndhyac](#)
LinkedIn:// [sandhyachandramohan](#)
Twitter:// [@s4ndhya](#)

COURSEWORK

GRADUATE

Algorithms • Data Structures
Data Management
Computer Security
Artificial Intelligence
Neural Networks and Deep Learning

SKILLS

LANGUAGES

Over 5000 lines:
Java • C# • Python • SQL • Solidity
Over 1000 lines:
C++ • C • JavaScript • HTML • CSS

FRAMEWORKS/ LIBRARIES

Extensive
.NET • Web2Py • Dropwizard
Comfortable
React.js • Bootstrap

EXPERIENCE

SENIOR MEMBER OF TECHNICAL STAFF | CAPITAL FLOAT

May 2017 – Aug 2018 | Mumbai, India

- Developed Amazon Pay EMI (India), for instant loans at Checkout on Amazon.com by Capital Float, used by millions of people in India daily
- Pioneered the Publish-Subscribe Messaging pattern to scale the system 10x
- Implemented Distributed Locking using Redis to handle 100% of all race conditions in a multi-user web application

MEMBER OF TECHNICAL STAFF | CAPITAL FLOAT

May 2016 – May 2017 | Mumbai, India

- Engineered a thread-safe implementation, synchronizing critical operations with Mutex objects to enable 100% real-time processing of all payments via APIs
- Increased productivity by 3x and reduced Operations Expenditure by 55%, automating workflows through a network of Crons and Schedulers
- Improved database performance by 30% and ensured 99.99% database availability by setting up MySQL Master-Slave Replication

SOFTWARE DEVELOPER | CAPITAL FLOAT

May 2015 – May 2016 | Mumbai, India

- Redesigned a Windows Desktop WPF application in the Singleton pattern to a multi-tier architecture RESTful Web Application following the MVC pattern
- Spearheaded the Unit of Work development pattern to carry out operations comprising a business process as one atomic transaction
- Ensured fast development cycles and codebase robustness by integrating the NUnit and Moq libraries for Unit Testing and Mocking

PROJECTS

RDBMS | A RELATIONAL DATABASE MANAGEMENT SYSTEM

Sept 2018 – Nov 2018

- Designed and developed a complete Relational Database Management System with optimized storage, index and query systems
- Built an Indexing Component via a B+ Tree supporting range predicates, managing persistent indexes over unordered data

MINESWEEPER-BOT | AN AI AGENT TO PLAY THE MINESWEEPER GAME

Oct 2018 – Dec 2018

- Modelled an AI agent based on solving Constraint Satisfaction Problems
- Solved 60% of Beginner worlds (8X8 10 Mines), 50% of Intermediate (16X16 40 Mines), 10% of Expert (16X30 99 Mines)

ROJI | A DECENTRALIZED FINANCIAL INCLUSION PLATFORM

Apr 2017 – May 2017

- Led the development of a platform for the 600 million strong informal work economy in India, through smart contracts in Solidity
- Built for scalability by using the Mapped Struct with Index design pattern to enable O(n) lookup of each object

AWARDS

2016	1 st /10 Teams	Capital Float Tech-Olympics
2016	1 st /50	Founder's Institute Ecosystem Scholarship
2015	Top 1% of 1 million	Indian Civil Services Preliminary Examination