

Cheran Senthilkumar

+1 (574) 329-2075 | cheran.v.senthil@gmail.com | U.S. Citizen

Education

IIT Guwahati | CLASS OF 2018
B.Tech. in Maths and Computing
Class Representative, 2014 - 2018
President at MATRIX, 2016 - 2017

Skills

Programming Languages

Over 50,000 lines: Python
Over 10,000 lines: C++, Go
Over 1,000 lines: Haskell, JS

Decentralized Technologies

• BitTorrent • ECC • Secret Sharing

Machine Learning

• Keras • TensorFlow • Torch




Database Programming

• Neo4j • Redis • MongoDB • SQL

DevOps

• CircleCI • Helm • Kubernetes
• AWS • GCP • Docker

Links

 Github:// cheran-senthil
 LinkedIn:// cheran-senthil
 Codeforces:// c1729

Coursework

Mathematics

Optimization
Combinatorics
Graph Theory

Computer Science

Data Communications
Operating Systems + Practicum
Computer Networks + Practicum

Finance

Monte Carlo Simulation
Stochastic Calculus
Statistical Analysis + Practicum

Experience

Chesslang | SENIOR SOFTWARE ENGINEER

Aug. 2020 – Dec. 2020 | Remote Contract

Torus Labs | SOFTWARE ENGINEER

Jul. 2019 – Aug. 2020 | Singapore

AI Palette | MACHINE LEARNING ENGINEER

Jan. 2019 – Jun. 2019 | Remote

Deep Learning Engineer at AI Palette, working on solutions for the FMCG industry.

BlockPunk | SOFTWARE ENGINEERING INTERN

Oct. 2018 – Jan. 2019 | Remote / Singapore

Blockchain Engineer at BlockStudios, the first decentralized marketplace for anime.

Goldman Sachs | SUMMER ANALYST

May 2017 – Jul. 2017 | Bengaluru, India

Interned as a strat with the Investment Management division of Goldman Sachs.

Projects

Bitcoin Keygen | BITCOIN UTILITY FUNCTIONS

Implements ECC in pure Python to generate Private Key-Public Key pairs in various ways. Further supports all utility features required by a Bitcoin node.

kNight.js | CRYPTO WEBMINER

kNight implements cryptonight_v7 and was one of the first free alternatives to coin-hive as a CryptoNight miner built with JS and C/C++ (WebAssembly).

Run on EC2 | CLI TOOL

Run-on-EC2 is a versatile CLI to quickly execute scripts on an AWS instances.

PyRival | COMPETITIVE PROGRAMMING LIBRARY

A pure Python library with optimized algorithms and tools for rapid execution.

Research

Bachelor Thesis | CONGRUENCES OF PARTITIONS

Jul. 2017 – Apr. 2018 | Dept. of Mathematics, IIT Guwahati, India

Worked with Abhishek Tyagi and Dr. Rupam Barman to investigate Congruences of Partitions, specifically pertaining to Rank Differences and Cubic Partition Pairs.

Summer Research | NUMBER THEORY

May. 2016 – Jul. 2016 | Dept. of Mathematics, IIT Guwahati, India

Worked under Dr. K. V. Srikanth to investigate the properties of Quadratic Residues. Later implemented a multivariate extension for the Chinese Remainder Theorem.

Contests

2019	1 st (United States)	HashCode Online Qualification Round (71 st Globally)
2019	277 / 102,319	ProjectEuler+ on HackerRank
2014	987 th (General)	IIT-JEE 2014 (99.93 Percentile)
2013	16 th (State)	National Mathematics Olympiad (Top 300 Nationally)