

# RAHUL VENKATESH

## Academic Details

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Year	Degree	Institute	CGPA/Percentage
2016-2020	B.Tech in Computer Science	Indian Institute of Technology, Delhi	7.370
2016	Class XII, Karnataka State	Mother Teresa PU College, Mysuru	92.1%

## Scholastic Achievements

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- Selected for **ACM-ICPC** 2018 Regional Round with teams competing from all over India.
- Secured **All India Rank** - 2754 in Joint Entrance Exam (Advanced) - 2016, among 150,000 candidates.
- Awarded Kishore Vaigyanik Protsahan Yojana (**KVYP**) **Fellowship** by Indian Institute of Science, 2015.
- Received National Talent Search (**NTS**) **Scholarship** for being in the top 1000 at National Level, 2012.

## Work Experience

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1. Order Entry Gateway | Squarepoint Capital AUG 2020 - PRESENT
  - Developed, tested, debugged and documented applications used for algorithmic trading.
  - Built new order entry gateways to various stock exchanges over different order entry protocols.
  - Improved **performance** of the application by **collecting and analyzing** latency-related **data**.

## Projects

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1. Parallel Laplacian Solver | Prof. Amitabha Bagchi AUG 2019
  - Implemented a **random-walk distributed** method to solve an important class of Laplacian Systems.
  - Experimented with various **optimizations** and used **Alias Method** to successfully improve performance.
  - Wrote and tested in C++; used OpenMP application programming interface for parallelization.
2. Public Credit Registry | Prof. Subhashis Banerjee, Prof. Subodh Sharma MAY 2019
  - Constructed first-order logical representation of data privacy, security and other correctness properties.
  - Proposed a complete example of a design with unit tests and end-to-end testing of the model.
  - Employed blockchain technology similar to **Hyperledger Fabrics** and **Software Guard Extension**.
3. AI Game-playing bot | Prof. Mausam OCT 2018
  - Created a bot to play Yinsh, a 2-player game on an hexagonal board with a branching factor of 30.
  - Used **Alpha beta pruning** with **static move ordering** to decide next move from set of all possible moves.
  - Utilized **Bitboards** and **Zobrist Hashing** to speed up move generation, thus searching 4 moves ahead.

## Relevant Coursework

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- Math: Linear Algebra and Differential Equations, Calculus, Probability and Stochastic Processes
- Computer Science: Data Structures and Algorithms, Principles of Artificial Intelligence, Machine Learning

## Technical Skills

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- Programming Languages: C/C++, Python, Bash
- Tools/Software: PyTorch, TensorFlow, OpenMP, CUDA