

# AADESH

Skills: C/C++, Python, Julia, Unix/Linux, SQL, Shell Script, Verilog, Git.

Languages: English, Hindi, Marathi.

## EXPERIENCE

### **Julia Season of Contribution(JSoC) (language Julia)**

May 2019 - Aug 2019

(Code of Conduct same as Google Summer of Code) (Tasks complete till now)

- Implemented Range over-approximation algorithm which improves Range bounds By 70-95% using TaylorModel to Zonotope conversion.
- Developed RangeEnclosures.jl a Julia Package which bounds polynomials using various methods, which was initiated by my PR to TaylorModels.jl.
- Implemented Branch and Bound(BNB) and Linearly dominated Bound(LDB) algorithm. BNB can minimise relative precision up to 50% and achieve relative precision  $[1e-5, 1e-5]$  in most of the cases. Debugged porting validated\_int in TMJets.
- Created Proof of Concept for "Domain Contraction Methods" using Interval Constraint Programming.

### **National Institute of Technology, Tichy — *Research Intern (Python, NLTK)*** Nov 2018 - Jan 2019

- Taught myself Python and Pandas, NLTK, sci-kit learn.
- Implemented naive Bayes classification, over text news from different sources.
- Analysed data by plotting graphs on Ipython cleaned\_data to feed in ML algorithms.

## LEADERSHIP ROLE AND SCHOLASTIC ACHIEVEMENT

- 7th in regional (Scholarship) HHS Exam among 20,000 student.
- Directed short film, managed a team of six, fixed spots to shoot and set workflow(timeline) such that everyone can contribute with maximum efforts. (Reel Club)

## EDUCATION

### **Indian Institute of Information and Technology, Trichy**

July 2017 - May 2021

*Computer Science and Engineering*

CGPA - 7.75 (Current GPA - 8.09)

- **Key Courses -**

Software Engineering, Internetworking Protocols(*Socket Programming C and Java*), Database Management Systems(*SQL, XML*), Computer Architecture - *Current Courses*.  
Data structures(*C/C++ Lab*), Introduction to Algorithms(*C/C++ Lab*), Probability Theory, Principles of Operational Research, Operating Systems(*Unix/Linux Lab*), Data Communications and Networking - *completed courses*.

- **Other activities** - 2nd place in Volleyball at Prothymas(IIIT Sports events), swimming.

**Narayana Junior College (High school)**

Percentage -94%