Ashutosh Kumar Verma
Computer Science & Engineering
Indian Institute of Technology Bombay
Email: ashutoshkv@cse.iitb.ac.in

UG Third Year (B.Tech.)
DOB: 15/06/1999
+91 9044001164

Examination	University	Institute	Year	CGPA/%
Graduation	IIT Bombay	IIT Bombay	2018	7.91

ACADEMIC ACHIEVEMENTS AND SCHOLARSHIPS

- Secured **All India Rank 14** in **KVPY SA** Stream out of 60,000 candidates [2014]
- Achieved **25th place** among 255 teams and **Honourabe Mention** in **ACM International Collegiate Programming Contest**, Amritapuri Regionals 2017-2018 [2017]
- Secured **All India Rank 221** in **JEE Advanced 2016** among 200,000 candidates [2016]
- Awarded **Advanced Performer's (AP)** grade in **Multivariable Calculus** at IIT Bombay [2016]

RESEARCH INTERNSHIP

Automatic Repair of SonarQube Bugs in Java Projects [May-July'18]
Guide: Prof. Martin Monperrus   *KTH Royal Institute of Technology, Sweden*

- Used INRIA's Spoon library to create a system to automatically repair SonarQube bugs in java code
- The System repaired 98 Sonar violations and merged 4 pull requests in Spoon's master branch
- Contributed to development of Sniper Mode of Spoon for clean source-to-source transformation
- Implemented automatic repair and test cases for 5 different Sonar-Java bugs

TEACHING EXPERIENCE

Teaching Assistant: Data Structures & Algorithms Lab [Autumn'18]
TA for Prof. R.K. Shyamasundar   *IIT Bombay*
- Responsible for setting lab problems, evaluation and helping students with doubts in the lab

TECHNICAL PROJECTS

Notes sharing Android application [September-November'18]
Course Project | Guide: Prof. S. Sudarshan   *IIT Bombay*
- Creating a file sharing app on PostgreSQL based on backend with JDBC API
- The app includes options to upload/download files for users, add/remove tags, remove spam and grant/revoke moderator previleges. Used trigram search to deal with typos in queries

Courspace [September-October'17]
Course Project | Guide: Prof. Kavi Arya   *IIT Bombay*
- Developed a Web app using Django backend for interaction between students and professors
- The web app serves as interface for students and teachers to discuss about the course. Provides options for homework assignments submission and further remarks on it from the teachers

Compiler for C-like Language [January-April'19]
Course Project | Guide: Prof. Uday Khedkar   *IIT Bombay*
- Developed a compiler for a C-like language. Used Lex and Yacc for tokenising and parsing, to create Abstract Syntax Trees, symbol tables and later translate to MIPS assembly code
- Supported functionalities like function calls, if-else statements, loops and arithmetic expressions

TECHNICAL SKILLS

Programming:	**Proficient :** C/C++, Java
	Moderate : Python, SQL, Bash, Scheme, Assembly
Softwares :	Spoon, Matlab, LaTeX, Git, Make, AutoCAD, Gnuplot, Linux