PIYUSH RANE

SENIOR YEAR UNDERGRADUATE ⋄ COMPUTER SCIENCE AND ENGINEERING

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EDUCATION

Year	Degree/Certificate	Institute	CPI/%
2018 - Present	B.Tech	Indian Institute of Technology, Kanpur	7.9/10.0
2018	CBSE(12)	R.K.V.M. Higher Secondary School, Gwalior(MP)	90.6%
2016	CBSE(10)	Kendriya Vidyalaya No - 5, Gwalior(MP)	10.0/10.0

ACADEMIC AND OTHER ACHIEVEMENTS

- 2018 - **All India Rank 3738**, Joint Entrance Examination(Advanced) among 200,000 candidates
- 2018 - **Qualified Stage 1** KVPY, Indian Institute Of Science Bengaluru, India
- 2017 - **Qualified both stage1 and stage 2** KVPY, Indian Institute Of Science Bengaluru, India

PROJECTS AND EXPERIENCE

Summer Internship   24 May 2021 - 16 July 2021
Axis Bank

- Created one **single node kubernetes** cluster using **minikube** on local machine and another **multi-node kubernetes** cluster using **Amazon EKS** on **AWS** and deployed the **RASA chatbot** on these cluster as a containerized application
- Customized the cluster for automatically scaling up or down the number of **pods** according to the load on the chatbot
- Technologies used were **docker, kubernetes, minikube, RASA open source, Docker hub, Github, helm, nginx**

Compiler-Light   *Course Project: CS335A*
Course name - Compiler Design   *github://guntas1808/CS335A-Compiler-Design*

- Collaborated in a team of five to build a **compiler for C language** by performing **lexical, syntax and semantic** analysis
- Produced **abstract syntax tree** in **dot** script and generated assembly code with the help of tools like **lex** and **yacc**
- Source language - **C**, Implementation language - **C++**, Target language - **x86 Assembly (AT&T Syntax)**

IITK Summer of Code (Full stack developer intern)   May 2019 - July 2019
Department of Computer Science and Engineering IIT Kanpur   *github://PiyushRane/Touch-EPFM*

- Collaborated in a team of five to **develop a web-app** that automated the manual feedback mechanism of employees
- The app allows admins to add or remove **employees**/**supervisors** from the database, while supervisors has the power to assign tasks to employees, give feedback to the employee and the employees can see their tasks, completion status.
- The technologies that we used for web-app were **JavaScript, HTML, CSS, JQuery, Bootstrap and Google Firebase**

App Development   February 2019 - April 2019
Association for Computing Activities(ACA)   *github://PiyushRane/Time-Table-App*

- Learned some basic **Linux**/**Unix commands** through Bandit OverTheWire Wargames by completing interesting levels
- Built a simple calculator using **HTML, CSS, JavaScript** that can perform arithmetic operations like addition, subtraction
- Learned **introductory Android Studio** and built a **Time Table App** to effectively manage time using language **JAVA**

2D regions Package   *Course Project: CS253A*
Software Development and operations   *github://PiyushRane/2D-RegionsPackage*

- Mastered and applied OOPS concepts to determine the position of a point relative to complex shapes as inside or outside
- Used Inheritance to allow for intersection, union and other operations between given shapes to find the position of point

TECHNICAL SKILLS

Programming Languages   C/C++, Python, HTML, CSS, Java Script,
Tools   Google Firebase, SQLite3, MongoDB, Github, Docker hub, LaTeX, lex, yacc

RELEVANT COURSES

Data Structure and Algorithms	Fundamentals Of Computing
Compiler Design	Principles of Database Systems
Software Development and Operations	Computer Organisation
Operating Systems	Theory of Computation
Introduction to Machine Learning	Introduction to Electronics
Linear Algebra and Ordinary Differential Equation	Python for Everybody, Coursera Specialisation (*Online*)