Tapesh Joham

tapeshjoham@gmail.com
+917833001170
tapeshjoham.github.io

Education

- **Indian Institute of Technology Mandi** — H.P., India
  B.Tech in Computer Science and Engineering; CGPA: 8.1/10 — *2014 - 2018*

Work Experience

- **Internet Business Japan** — Bangalore, India
  Software Developer — July 2018 - Present
  - Creating immersive VR, AR and XR Apps using Unreal Engine 4 and Unity with the integration of industry's latest technologies. Worked on devices like Oculus Rift, Oculus Go, and Magic Leap One.
  - Design and Development of web based application which uses Go server for handling requests as well as for database access.
- **Khosla Labs** — Bangalore, India
  Software Engineering Intern — Dec 2016 - Feb 2017
  - Worked on different APIs and fetch user data from different social networking sites like Facebook, Google, Twitter, etc. using different python libraries.
  - Wrote micro-services and Spark Jobs for computing different features, which then fed to the Machine Learning Pipeline. [Spark, Cassandra, Python, ML]

Selected Projects

- **Computation of bounds for an undirected network**: Trying to prove/ disprove the conjecture based on network coding. Focuses on design, implementation, and analysis of algorithms to compute outer as well as inner bounds on undirected network graph. Required background in algorithm design, graph theory, and multi-commodity flow problem. [C++]
- **Analyzing Amazons Warehouse using AWS Elastic MapReduce**: Analyzed Amazons item database containing billions of records with incoming real-time updates, to show top products based on some predefined criteria. Used AWS Kinesis for streaming data, HBase for storage and HiveQL for computation on the AWS Elastic MapReduce cluster.
- **Hosting heterogenous containerized Servers/App platforms on a physical server**: Docker container-based cluster to host heterogeneous servers with performance load balancing via NGINX. Used Docker-compose to link docker containers implementing front-end and back-end platforms. Implemented Nginx for balancing the request load to increase the availability of sporadic requests.
- **3D Holographic Projector**: Projects a 3D Model in the pyramid-shaped structure which can be controlled by moving the tracer. Used Unity3D to create the application, which then projected on to the pyramid. Used OpenCV and *C#* Scripts to detect and control the 3D Model. Also integrated Leap Motion Sensor to control the 3D Model. [Unity3D, *C#*(Basic), Leap API]

Technical Skills

Strongest Areas	Data Structures and Algorithms
Languages	C, C++, Python, Golang, JS
Tools/Frameworks	Unity, UE4, STL, LaTeX, MySQL, Git

Achievements and Awards

- Qualified for ACM ICPC 2016 India Finals (Among Top 100 Teams from India)
- Ranked 4th at Amazon Code Wizard Challenge 2017 (out of 189 teams from all IITs)
- Ranked 42th at ACM ICPC 2017 Online Preliminary Round (out of around 3250 teams)
- Ranked 18th at ACM ICPC 2016 Kolkata Regionals
- Ranked 95th(Global) & 45th(India) in CodeChef Long Challenge(Sept 16) among 8,500 Candidates
- Ranked 3rd in IIT Mandi's Design Practicum
- Ranked 3rd in Coding War, IIT Mandi Coding Competition

Hobbies

Reading, Travelling, Competitive Programming, Solving Puzzles, Playing Computer Games.