

Akshay Kharbanda

264, Bakul Nivas, IIIT Hyderabad,
Gachibowli, Hyderabad, Telangana-500032

📧 : Akshay99

☎ : +91-9910123967

✉ : akshay.kharbanda@students.iiit.ac.in

EDUCATION

- **International Institute of Information Technology** Hyderabad, India
Bachelor of Technology in Computer Science Engineering; GPA: 8.2/10 *Aug. 2017 – Present*
- **Montfort Senior Secondary School** New Delhi, India
Class X GPA: 10.0/10, Class XII CBSE: 93.6% *April. 2007 – May. 2017*

EXPERIENCE

- **Careerty Informatics** Hyderabad, Telangana
Backend Developer *Aug. 2018 - Dec. 2018*
 - **Database and server side APIs fetching statistics for AI telephony calls:** Created backend database, server side APIs and report portal for call-records, performance tracking and usage tracking. Additionally, implemented graphical output of the call data metrics with sorting, pagination, search and filtering capability in the frontend. (Rest APIs, Javascript, Python-Flask, MySQL)
End result: The startup gained a fully deployable backend database and report portal UI for the call statistics.
- **IOT 83** Gurgaon, Haryana
AWS Infrastructure Engineer *May 2019 - July 2019*
 - **Resource Management Portal:** Worked in the software development team to design a resource management portal in Flask displaying AWS EC2 resource usage statistics within the current billing period to minimize AWS billing costs and optimize resource usage. Created triggers on the portal to turn on/off the EC2 resources from frontend by calling AWS CLI. (Rest APIs, Python(Flask), AWS CLI).

MAJOR PROJECTS

- **AI Bot for Extreme version of Ultimate Tic-Tac-Toe (Language: Python 3):** Coded an AI bot in Python using smart heuristics and combination of search techniques (A* search, Minimax tree search and Alpha-Beta pruning on mini-max decision trees) to play Extreme-Tic-Tac-Toe. Secured 6th position amongst the 82 bots competing in our class.
- **Tic-Tac-Toe game on Ethereum Blockchain (Language: Solidity):** Made a smart contract in solidity for the Ethereum blockchain that facilitates 2-player Tic-Tac-Toe. The contract accepts ethers from the players to start the game, and after the series of 4 games, transfers the total ethers to the winner, and in case of a draw, transfers the total ethers to the contract's owner's address.
- **Image Classification and Verification with a popular problem space of Face (Language: Python 3):** A project that included in-depth learning as well as computation of eigen-faces required to satisfactorily reconstruct a person in the given dataset. Face recognition using Kernel and Classifiers, Visualization of faces using t-SNE, and face verification was performed.
- **BookMyShow Clone (Languages: Python 3, Flask):** Built a web application containing movie listings and booking capability. Implemented secure authentication, along with seat selection and booking confirmation for the user. Further created an admin section to add/remove movies and perform other administrative tasks.
- **3D Flight Simulator (Language: C++):** Built a 3-D simulation of a moving aircraft in OpenGL 3.0 with different viewing, movement options and collision detection. The simulation had 6 different views, which could be switched on the fly.
- **Subway Surfer Game (3D) using WebGL (Language: JavaScript, WebGL):** Built a variant of the Subway Surfer Game for the browser. Textures, lighting, shaders were also implemented. Further, original game sound effects were also added.
- **Terminal Shell (Language: C++):** Coded up a custom terminal shell with integrated sys-calls. All common shell commands had native support with sys-calls used for less commonly used commands. The shell supported chained redirection and piping, interrupt signals, multiple commands per line as well as both background and foreground processes.

MISCELLANEOUS

- Regular participant on *Codeforces* with the highest rating of 1574 (Specialist).
- Regular participant in programming competitions such as *ACM-ICPC*, *Facebook Hacker Cup*, *Codechef SnackDown*.
- *Dean's List* (IIIT Hyderabad) awardee for the academic year 2018-19.
- Secured AIR 442 in *KVPY SX* 2017.
- Secured AIR 780 JEE Main 2017 and AIR 2728 in JEE Advanced 2017.

SKILL SET

- **Languages:** C, C++, Python2/3, Javascript, Bash Script, MySQL, Matlab
- **Web:** HTML5, CSS3, ReactJS, JQuery, Bootstrap 3/4
- **Frameworks:** Docker, Flask, Django, OpenGL, WebGL
- **OS:** Linux, OS X, Windows
- **Miscellaneous:** Git, Shell, L^AT_EX, ELK Stack, XML, Assembly, Solr, Lucene, OpenGL/WebGL, Neo4J