

EDUCATION

Maharaja Agrasen Institute of Technology

Bachelor of Technology in Computer Science and Engineering (CGPA: 8.56/10.00)

Rohini, Delhi

Aug 2015 – May 2019

WORK EXPERIENCE

Newgen Software Ltd

Software Engineer

Noida, UP

Aug 2019 – Oct 2020

- Worked in a team of 12 employees for a Canadian client (CMiC)
- Improved, maintained and tested existing web applications in the product suite and resolved client reported issues
- Developed and documented APIs for applications made by Android, iOS and Desktop team
- Worked on: Java, Oracle DB, PL/SQL, MongoDB, Struts, Jersey, JavaScript, HTML, CSS

Mintware Ventures

Web Developer Intern

Noida, UP

Jun 2018 – Aug 2018

- Developed a dashboard to manage company's employee details, existing projects and deployments.
- Worked on: Angular, Typescript, Node.js, MongoDB

CRIS (Centre for Railway Information Systems)

Web Developer Intern

New Delhi, Delhi

Jun 2017 – Aug 2017

- Developed a web application for exchange of goods among vendors and production units in Indian Railways.
- Worked on: Ruby on Rails, SQL, PostgreSQL, HTML, CSS, JavaScript

PROJECTS

Gita App [GitHub][Play Store]

Jan 2021

- Developed a minimalistic responsive flutter app to read Bhagwat Gita using web scrapped data in Hindi.
- Technologies Used: Dart, Flutter, Python, BeautifulSoup

Camel [GitHub]

May 2019

- Developed a scalable machine learning library with Linear Regression, Logistic Regression, KNN, K-means & Perceptron.
- Technologies Used: C++, Armadillo, CMake

POS Chain [GitHub]

Dec 2018

- Implemented the proof of stake consensus algorithm used in Ethereum 2.0
- Technologies Used: Node.js

Decentralized Flying Ad Hoc Networks

Aug 2018

- Simulated the working of decentralized FANETs using Practical Byzantine Fault Tolerance as consensus algorithm.
- Collected data on throughput, latency and message overload and represented the nodes graphically.
- Technologies Used: Node.js, Vis.js, Express, Postman, Shell Script

SmartChallan [GitHub]

Mar 2018

- Developed APIs for SmartChallan App using Ruby on Rails as part of Smart India Hackathon – 2018.
- Technologies Used: Ruby on Rails, PostgreSQL, Postman

Document Verification Decentralized App

Dec 2017

- Developed a decentralised application to verify digital documents using Ethereum.
- Technologies Used: Solidity, Remix, Ganache, React, Web3, HTML, JavaScript, CSS

Referendum [GitHub]

Sep 2017

- Developed a web application to conduct custom polls with real time notification support.
- Technologies Used: Ruby on Rails, PostgreSQL, JavaScript, JQuery, HTML, CSS, Bootstrap, AWS EC2

PUBLICATIONS

Articles

- Implementing Merkel Tree and Patricia Trie, *Coinmonks*, 2020 [\[Link\]](#)
- Implementing PBFT in blockchain, *Coinmonks*, 2019 [\[Link\]](#)
- Implementing Proof of Stake Part 1 – 6, *Coinmonks*, 2019 [\[Link\]](#)
- Implementing blockchain and cryptocurrency with Proof of Work Part 1 – 9, *Coinmonks*, 2018 [\[Link\]](#)

Papers

- **K. Khullar**, Y. Malhotra, A. Kumar, **Decentralized and Secure Communication Architecture for FANETs using Blockchain**, *Procedia Computer Science*. 173 (2020) 158-170. doi: 10.1016/j.procs.2020.06.020
- M. Sharma, A. Raina, **K. Khullar**, H. Khandelwal, S. Mehrotra, **Scalable Machine Learning in C++ (CAMEL)**, *Advances In Intelligent Systems And Computing*. (2020) 1063-1081. doi: 10.1007/978-981-15-5148-2_91

MISCELLANEOUS

- Contributed to Ethereum Improvement Proposals by drafting a token standard, *EIP – 823*, 2018 [\[GitHub\]](#)
- Contributed to the development of a landing page for the Annual Technical and Cultural event of Maharaja Agrasen Institute of Technology, *Techsurge and Mridang 2018* [\[GitHub\]](#)

SKILLS

Proficient - C++, Node.js, Python, Git, Java, PL/SQL, HTML, CSS, JavaScript, React

Fluent - C, Ruby, Typescript, Angular, Solidity, AWS, Jupyter Notebook, Shell Script, MongoDB, Flutter