UTSAV KRISHNATRA

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TECHNICAL SKILLS

Languages: Python, Java, C, C++, JavaScript, CSS3, SCSS, HTML5, JSP, Servlets, JSTL, XML
Web Frameworks and libraries: React JS, React-Redux, Redux-Thunk, React-Saga, Redux Toolkit, NodeJS, Express, Angular
Databases: MySQL, Mongo DB, Firebase
Cloud Platforms: AWS
Tools/Methodologies: GIT, Scrum, Agile, VScode, Eclipse, Jira, Linux, Fedora, Ubuntu

EDUCATION

Master of Applied Computing   Jan 2023 - Apr 2024
University of Windsor, Windsor, Ontario
- CGPA (3.2/4) - 80%

Bachelor of Technology (Information Technology)   Aug 2016 - Oct 2020
Guru Gobind Singh Indraprastha University, NEW DELHI, INDIA
- CGPA (8.2/10) -82%

WORK EXPERIENCE

ASSISTANT SYSTEM ENGINEER   Apr 2021 - Oct 2022
TATA CONSULTANCY SERVICES, BANGALORE, KARNATAKA
Technologies: ReactJs, NextJs, MS SQL Server, Material UI, CSS3, HTML5, NodeJS, Express, Angular, AWS
- Assessed educational requirements for the University of Sydney and translated them into technical specifications. Designed, implemented, and deployed a real-time customer request monitoring dashboard using ReactJS, incorporating HTML5, CSS3, and JavaScript for intuitive data visualization. Leveraged MongoDB for secure data storage and employed Node.js and Express to create server-side logic while integrating middleware for efficient HTTP request handling.
- Leveraged external libraries like WhatsApp, socket.io, S3-Bucket, to enhance app's functionality and Managed version control using GIT as a code repository for collaboration and tracking changes.

RESEARCH ASSISTANT
Technologies: Java, Cipher Algorithms   Jan 2020- Oct 2020
University School of Information and Communication Technology, GGSIPU, New Delhi, India
- Worked on cryptographic techniques to develop a pattern-based cipher using 2 dimensional geometries.
- Created a symmetric key algorithm using multi-layered ciphering techniques while designing a custom cipher that used Cross Language Cryptography techniques, pseudo-random keys (SALT) along with unique properties of geometric shapes such as vertices, medians, orthocenters, and centroids to develop encryption and decryption techniques.

SUMMER INTERN
Technologies: Python (3.6), HTML5, CSS3, JavaScript, ReactJs, NodeJs, MongoDB, GIT   Jan 2020- July 2020
ERNST & YOUNG, GURUGRAM, HARYANA
- Participated actively in requirements analysis, comprehending technical needs and contributing to client meetings for defining website goals and development strategies.
- Developed engaging user interfaces using HTML5, CSS3 and JavaScript within the ReactJS framework.
- Enhanced functionality by integrating features to invoke web APIs/services through tools like Axios and JSON.
- Integrated external libraries including Cloudinary, Twillio, chart.js, body-parser, bcrypt.js and crypto.js to expand project capabilities.

SUMMER RESEARCH INTERN
Technologies: Java, JSTL, Servlets, JSP, XML, Swing, MySQL, Java AWT, HTML5, CSS3   Jun 2018 - Jul 2018
DEFENCE RESEARCH AND DEVELOPMENT ORGANIZATION, NEW DELHI, INDIA

- Created app using Java, Java Spring Boot, JSP, XML, JDBC, Servlets, and MySQL for library management for in-house employees.
- Integrated authentication and authorization mechanism with DRDO's custom APIs and cryptic algorithms for enhanced security.
- Implemented RESTful APIs to facilitate data exchange between frontend and backend.

CERTIFICATES

- Scrum: The Basics, LinkedIn
- Learning Hadoop, LinkedIn
- Learning Jira Software, LinkedIn
- Agile Software Development: Scrum for Developers, LinkedIn
- Learning Git and GitHub, LinkedIn, Learning Hadoop, LinkedIn
- Software Design: From Requirements to Release, LinkedIn

PROJECTS *(CLICK HERE TO SEE THE PROJECT DETAILS)*

- **Client -Server mini**–Bash Application for **Linux** using C, C++ *(LINK)*
- **Web Search Engine in Java** (using BFS for Crawlers, Ternary Search Tree, Heaps, HashMap, Priority Queues, TRIE for dictionary, Regex. *(LINK)*
- **Resume Builder** (React Redux, Authentication, SCSS, HTML)
- **React Reels** (Firebase, React, Material UI, Express, Node)
- **Hacker rank Automation** (**puppeteer** and **Axios** to automate question solving. Axios fetches data from relevant APIs and puppeteer navigates to the desired section and feeds the answer data simulating a user through various options available.)
- **Movies App** Using React Functional Components
- **Full Stack Food Delivery** Application (MERN stack) with Payment Gateway Integration *(LINK)*
- **CLI shell in Linux-** an interactive command-line shell that handles diverse user commands, including **piping**, **redirection**, conditional **execution, background processing**, and **sequential** execution, while adhering to specific rules and providing **detailed error messages**. *(LINK)*
- **Process Management and Optimization in LINUX in C :** In this project,"**prcinfo**" is a C program for querying processes within a specified hierarchy, enabling precise exploration of process relationships. Conversely,"**deftreeminus**" focuses on managing defunct processes by forcibly terminating parent processes, offering customizable control over process tree optimization. *(LINK)*
- **Automated Backup System with Bash Scripting in Linux in C:** This project focuses on developing a continuous background bash script, "**backup.sh**," to create **complete** and **incremental backups** of .**txt** files in a specified directory tree. The script maintains a log file, automating a practical backup system for efficient data preservation. *(LINK)*

PUBLICATIONS *(LINK)*

APRIL 2020
PATTERN ORIENTED SECURITY ENCRYPTION TECHNIQUE (POSET)[SSRN]
- Usage of two-dimensional(2D) figures and proposed 3D geometry in encryption and decryption; additional security using multiple levels of encryption and customized padding.

COMPETITIVE CODING *(LINK)*
- Solved nearly 200 **Leetcode** Questions (91 **Medium**, 37 **Hard**, 44 **Easy**)