# Technical Skills: Java script Application Development

**Frontend:** HTML, CSS, JavaScript, React.js, React Ecosystem, proficient in Advanced Java script concepts.

**Backend**: Node.js (Module Systems, HTTP Servers, Express.js), RESTful API Design and Implementation, serverles, SQL (CRUD operations, Transactions, Core DBMS concepts), MySQL, **Networking and Protocols:** Understanding of Internet Protocols, DNS, Networking, Sockets, IP Addressing.

**Cloud Computing and Hosting:** AWS (Amplify, Lambda, RDS, EC2), Web Hosting using FTP Development Tools and Environments,

**Package Managers**: npm., Yarn, **Version Control**: Git, GitHub, **Chrome Dev-Tools** (Console, Sources, Network Tabs, application tab)

**Linux Fundamentals** (Common Commands, Vi Editor**), Programming Languages and Scripting**: JavaScript, java, c++. **Database Management:** SQL, MySQL (MySQL Workbench) **Other Skills:** Understanding of V8 Engine, JavaScript Runtime, Event Loop, Execution Context Knowledge of Server Programming, File Handling, and Middleware in Express.js, working with virtual threads in JS.

# Experience:

**Data Visualization web portal for oil and gas company:** [**http://dcm.uhcl.edu/caps24g12/**](http://dcm.uhcl.edu/caps24g12/)

This project, developed for Optime Subsea in Houston, supports three user levels: Admin, Supervisor, and User, with hierarchical authorization. It allows users to upload various file types (.pdf, .csv, .zip) under company projects on the homepage. The system can handle zip file uploads up to 10GB, which are stored and unzipped on the server. The extracted data is displayed at the front end, where it can be analyzed through graphs generated by Chart.js.

**User Interaction**: The user Interacts with the React front end, which is deployed and managed through UHCL web server.

**Dataflow:** The Front end needs to interact with the backend it makes an HTTP request(fetch) to Node js hosted on AWS EC2.

**Backend processing**: Written in Node-JS, process the incoming requests. When user uploads a file large data handled by multer using streams and unzipping through yauzl. When user request for analysis. Nodejs runs the python script which analyzes the file form the server file system and gives analyzed data to Node js end point.

**3d-product-configurator: Visit to see the up-and-running application:** [**https://test.d3vw6gqo0mydsq.amplifyapp.com/**](https://test.d3vw6gqo0mydsq.amplifyapp.com/)

This is a Research Project, in this project, the application is collecting valuable data from the user such as how much time the user spent on customizing the colors of different parts of the product, and which color the user chose for a particular part of the product. I have Used the Shoe As my Product in this project, where the user can change the colors of the 3d shoe, the time spent (MS) on each part and which color the user chooses will recorded in the database.

**User Interaction**: The user Interacts with the React front end, which is deployed and managed through AWS Amplify.

**Dataflow:** The Front end needs to interact with the backend it makes an HTTP request(fetch) APIs hosted as AWS Lambda functions

**Backend processing**: These Lambda Functions, Written in Node-JS, process the incoming requests. They Perform Necessary operations such as Querying or updating the Database.

**Banking application: Up-And-Running Application:** [**https://test.d3tcmw7i9djltt.amplifyapp.com**](https://test.d3tcmw7i9djltt.amplifyapp.com)

# Education:

**Graduation:**

Master’s in computer science- University of Houston clear lake, Houston, Tx

**key courses**: Advanced Java, Computer Security and Cryptography, Mobile application Deveplopment(ios), Machine Learning, Advanced Operating Systems, Database Management System, Concurrent Programing and Design Analysis of Algorithms, Internet Protocols.