PAVAN SOMA SHEKAR

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EDUCATION

Northeastern University, Boston, MA   **Expected May 2024**
Master of Science in Information Systems

SJB Institute of Technology, Bangalore, India   **Jul 2019**
Bachelor of Engineering in Computer Science and Engineering

TECHNICAL SKILLS

- **Programming Languages**   Java, Python, HTML, CSS, JavaScript, TypeScript
- **Web Frameworks and Libraries**   React.js, Angular, Node.js, Express.js, Spring Boot, Django, Bootstrap
- **Testing**   Jest, Enzyme, Protractor, Jasmine, Karma, Mocha, Chai
- **Databases**   MySQL, MongoDB, PostgreSQL, DynamoDB, Hibernate, Sequelize.js
- **Cloud**   AWS, Azure, GCP, Docker, CI/CD, Git, GitHub Actions, Packer, Pulumi

WORK EXPERIENCE

Software Engineer, *OnSolve, Bangalore, India*   **Apr 2022 – Aug 2022**
- Created engaging user interfaces for the OnSolve platform, focusing on **responsiveness** and user experience using **React.js**
- Boosted OnSolve platform's performance by 15% by integrating 3 front-end modules and employing React.js (**lazy loading, code splitting**) and **Redux** for state management and **memoization**, reducing load times
- Implemented **unit tests** for front-end modules employing **Jest** and **Enzyme** for **React.js** with **code coverage** of over 90%
- Ensured high quality through stringent **code reviews** and administered 2 OnSolve.UI releases via **CI/CD** with **GitHub Actions**, seamlessly integrating **Docker** for efficient delivery in containerized environments

Senior Systems Engineer, *Infosys Limited, Bangalore, India*   **Sep 2019 – Apr 2022**
- Drove innovation by playing a pivotal role in the development of 2 **Angular**-based web applications, effectively addressing evolving client needs and resulting in a 30% increase in client engagement
- Spearheaded the Smart Classroom project at Infosys by developing a high-accuracy **YOLOv3** based chair detection model using **OpenCV** and a **MEAN** stack-based dashboard, significantly enhancing the interactive learning environment
- Contributed to the InfyMansions project, developing **full-stack** modules with **MEAN** stack technologies and integrating **Material UI** for enhanced user interface design
- Formulated a comprehensive testing strategy utilizing **Protractor**, **Jasmine**, and **Karma** frameworks, achieving 90% test coverage for **end-to-end** and **unit testing**
- Played a key role in workforce development by conducting workshops in **JavaScript**, **Angular**, and **React.js** for 200 employees and providing **mentorship** to 10 new hires in the Foundation Program

TECHNICAL PROJECTS

EduAssign (Node.js, Express.js, MySQL, Sequelize, Mocha, Chai, Packer, Pulumi, AWS, GCP) | *Northeastern University*
- Crafted EduAssign with **Node.js/Express.js** and **Sequelize** for **MySQL**, enhancing assignment management by 40%
- Executed **CI/CD** with **GitHub Actions**, integrating **Mocha/Chai** for integration testing and **Packer** for AMI creation, reducing deployment times by 60% and bugs by 25%, streamlining development and deployment
- Augmented **AWS** infrastructure (**EC2, Lambda, SNS, SES, Route 53**) with **load balancing**, **auto-scaling**, **CloudWatch**, **SSL certificates**, and **GCP** for GitHub downloads via **Pulumi**, doubling user load capacity and cutting management effort by 70%

Event Management System (HTML, CSS, Bootstrap, Java Spring Boot, Hibernate, MySQL) | *Northeastern University*
- Developed a fully-functional event management system using **Java Spring Boot**, **Hibernate**, and **MySQL**, allowing users to create, manage, and promote events through an intuitive user interface, handling over 200 events seamlessly
- Architected the **database schema**, **REST APIs**, and **front-end** views to develop a scalable and maintainable system
- Established robust **email notification** and **image hosting**, leading to a 10% increase in overall user experience and satisfaction

InventoryHub (Python, Django, PostgreSQL, Heroku) | *Northeastern University*
- Strategized and implemented a highly resilient **Django REST Framework API**, enforcing data integrity and security with rigorous validation, authentication, and authorization using **Token Authentication**
- Orchestrated the implementation of a scalable database schema using **PostgreSQL**, optimizing performance and scalability
- Incorporated **Swagger** for automatic API documentation and seamlessly deployed the Django application on **Heroku**, streamlining the development workflow, resulting in a 20% decrease in deployment time

CERTIFICATIONS

- **AWS Certified Developer - Associate**, Validation Number - B1LNQCDJYM1EQ6WP
- **Microsoft Certified AZ-900: Azure Fundamentals**, Credential ID - H576-2553