# PAVAN SOMA SHEKAR

Boston, MA

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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**    Angular, React.js, Node.js, Express.js, Spring Boot, jQuery, Bootstrap, Tailwind CSS
- **Testing**          Jest, Enzyme, Protractor, Jasmine, Mocha, Chai
- **Databases**          MySQL, MongoDB, Hibernate, Sequelize
- **Cloud**          AWS, Azure, GCP, CI/CD, GitHub Actions, Automated Testing, Pulumi
- **Data Science Tools and Libraries**    NumPy, Pandas, Sci-Kit Learn, MatplotLib, Seaborn, OpenCV
- **Software Tools and Technologies**    Git, GitHub, Heroku, Anaconda, Jupyter Notebook, Visual Studio Code, Eclipse

## WORK EXPERIENCE

**Software Engineer**, *OnSolve, Bangalore, India*                                                                                    **Apr 2022 – Aug 2022**
- Enhanced and integrated 12 front-end modules of the OnSolve Platform (OnSolve.UI, Incident Management, Risk Intelligence) using **React.js** and **Redux** to further boost application performance by 15%
- Implemented **unit tests** for front-end modules employing **Jest** and **Enzyme** for **React** with **code coverage** of over 90%
- Ensured high quality releases by managing stringent **code reviews** and administering two OnSolve.UI releases via **CI/CD** with **GitHub Actions**

**Senior Systems Engineer**, *Infosys Limited, Bangalore, India*                                                                      **Sep 2019 – Apr 2022**
- Drove innovation by conceptualizing and developing 5 web applications, meeting emerging client needs using **Angular**
- Bolstered workforce skills by teaching **JavaScript**, **Angular** and **React.js** to 200 new employees, leading hands-on workshops
- Contributed to talent development by **mentoring** 10 new hires, providing actionable feedback during the Foundation Program

**Machine Learning Research Intern**, *Speckbit Exploratories, Bangalore, India*                                                      **Jan 2019 – Mar 2019**
- Devised a **Python**-based Air Quality Prediction model leveraging the Air Quality Dataset-UCI Machine Learning repository, yielding significant advancements in urban air quality forecasting
- Engineered a **machine learning** suite that accurately predicts urban benzene levels and temperature variations
- Utilized **Linear**, **Lasso** and **Decision Tree Regression**, achieving a 99.6% accuracy in urban air quality monitoring

## TECHNICAL PROJECTS

**EduAssign (Node.js, Express.js, MySQL, Sequelize, Mocha, Chai, Packer, Pulumi, AWS, GCP) |** *Northeastern University*
- Crafted EduAssign using **Node.js/Express.js** with **Sequelize** for **MySQL**, streamlining assignment management
- Executed **CI/CD** with **GitHub Actions** for automated testing (**Mocha/Chai**) and AMI creation via **Packer**, enhancing development workflow and deployment
- Augmented the infrastructure using **AWS EC2**, **Lambda**, **SNS**, **SES**, **Route 53** for DNS management and **Google Cloud Storage** employing **Pulumi**, emphasizing **load balancing**, **auto-scaling** and **CloudWatch** for comprehensive logging and monitoring

**FoodZilla, a food delivery web-app  (MongoDB, Express.js, React, Redux, Node.js, Firebase) |** *Northeastern University*
- Built 3 out of 6 **full stack** modules, such as the auth flows (login, register, forgot password, email verification - all using **JWT**), add-to-cart feature, as well as the admin portal for inventory management
- Integrated **Stripe API** for seamless checkout and the **Tasty API** for suggesting different recipe options for consumers
- Leveraged **Firebase** as a cloud image store for the product inventory

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

## CERTIFICATIONS

- Microsoft Certified **AZ-900: Azure Fundamentals**, Credential ID - H576-2553