Sreekanth Vinodkumar
Software Engineer

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SUMMARY OF QUALIFICATIONS

- Skilled Software Engineer with **over 3 years** of experience in advanced coding, development and debugging
- Proven team player adept at collaborating effectively in cross-functional teams to ensure project success
- Strong analytical and problem-solving skills through collaboration with colleagues and clients, coupled with strong written and verbal communication skills for effective team and stakeholder interaction

TECHNICAL SKILLS

- **Programming Languages and Frameworks:** JavaScript, Python, C, Java, Shell Script, SQL, HTML, XML, TypeScript, Dart, React, React Native, Next.js, Redux, Node.js, Express, Flutter, CSS, Bootstrap, Tailwind
- **Database Systems:** MongoDB, MySQL, Firebase, DynamoDB
- **Machine Learning:** NumPy, Scikit-Learn, Pandas, Matplotlib, Tensorflow
- **Tools:** Microsoft Visual Studio, Docker, Pycharm, Android Studio, Eclipse, Visual Studio Code (VS Code), Figma, Git, GitHub, GitLab, Jira, Asana, Trello
- **Cloud Computing Operating Systems:** AWS (Lambda, S3 bucket, EC2 instance, CloudFront), Linux, OS X, UNIX

WORK EXPERIENCE

Software Developer   (May 2023 - Dec 2023)
University of Windsor, Windsor, Ontario
Technology: React, Node.js, HTML, CSS, MongoDB

- Enhancing an information management system for Windsor Essex Community Compassion Care
- Leveraged Node.js, Express, React and MongoDB to develop new features and bug fixing
- Design, develop and test custom REST APIs to improve reliability
- Collaborated with the Director of the project in gathering user requirements and feedback
- Revamped legacy class component codebase, transitioning to React functional components with hooks, resulting in a **30% improvement** in development efficiency
- Implemented report generation and PDF conversion functionality to enhance data visualization capabilities
- Implemented data base architecture and facilitated seamless data migration from AWS to Azure servers
- Demonstrated expertise in problem solving and troubleshooting by successfully implementing new features, delivering high-quality code, and fixing complex bugs/defects to ensure application stability

Software Engineer   (Nov 2021 - July 2022)
QBurst Technologies, Kochi, India
Technology: React, Node.js, HTML, CSS, MongoDB, Python

- Developed and deployed 2 sophisticated MVC web applications with advanced functionalities and intricate architectural design
- Led a development **team of 3** members for one project and actively took part in client calls and code reviews
- Innovated and implemented new functionalities, seamlessly integrating databases and generating comprehensive reports
- Published **2 npm packages**, contributing to the open-source community
- Developed strong written and verbal communication skills by actively engaging in client communications and proficiently creating documentation
- Leveraged JavaScript's extensive ecosystem and continuously explored new frameworks and tools with a curious mindset
- Successfully implemented CI/CD pipelines, reducing software build and deployment time by 10% and ensuring faster time to market
- Used Agile methodology to break down tasks into smaller sprints for more manageable development

Software Developer   (May 2020 - Nov 2021)
Riafy Technologies, Kochi, India
Technology: React, Node.js, HTML, CSS, MongoDB, Natural Language Processing

- Developed and deployed five web applications, each achieving a **25% increase** in user engagement
- Analyzed both business and technical requirements with respective teams
- Maintained regular communication with teams on project progress

- Streamlined debugging time by refactoring code using object-oriented design principles, improving code and reducing error rates
- Developed a resume parser application utilizing NLP (Natural Language Processing) techniques
- Proficient in both independent and collaborative work, with the ability to excel in individual tasks as well as contribute effectively within a team
- Setup and maintained DevOps pipelines using Git for streamlined software development and version control
- Extensive hands-on experience with AWS Lambda, leveraging its serverless capabilities for efficient and scalable application development

PROJECTS

FinTrack   (Feb 2024 - current)
Technology: React Native, Firebase, CSS, Tailwind, OpenAI, Git
- Developing FinTrack, a cross-platform financial management application utilizing React Native for seamless operation on both iOS and Android devices
- Incorporating OpenAI for precise expense categorization and personalized financial guidance, empowering users with tailored recommendations for effective financial management
- Facilitating easy addition and sharing of trip expenses, including bill splitting, shared expense calculation, and automated notifications to trip participants

Heyrides ([Link](#))   (Oct 2023 - Mar 2024)
Technology: React, Node.js, HTML, CSS, MongoDB, AWS
- Developed a responsive and user-friendly frontend using React.js, complemented by a secure and scalable backend infrastructure with Node.js and MongoDB for effective data management and storage in the Heyrides platform
- Implemented email triggering functionality from the backend using Nodemailer
- Orchestrated the deployment of both the frontend and backend components on an EC2 instance, effectively hosting and managing the application's resources in the AWS cloud environment
- Established a seamless connection between the application and its domain (heyrides.ca) by leveraging Route 53 for domain registration and management
- Implemented Nginx as a reverse proxy to efficiently redirect incoming requests to the locally running backend, optimizing the overall performance and responsiveness of the Heyrides platform
- Enhanced security measures by creating and configuring an SSL certificate from AWS Certificate Manager, ensuring secure data transmission, and seamlessly integrated it with CloudFront for improved content delivery

Mini-terminal ([Link](#))   (Apr 2023 - May 2023)
Technology: C, Socket, TCP/IP, Unix
- Designed and implemented robust client-server connections using the TCP protocol
- Implemented load balancing techniques to distribute network traffic effectively between primary and secondary servers
- Handled client-side requests, processed them on the server side to deliver requested data and files, and adeptly implementing secure, scalable solutions to cater to diverse client needs

Impact of people's Emotion on the crypto market   (Jan 2023 - Mar 2023)
Technology: Python, Kaggle, TextBlob, IBM Watson NLP
- Conducted in-depth analysis of a Twitter dataset related to the Russian-Ukraine War period, obtained from Kaggle, to gain valuable insights into public sentiments and reactions
- Implemented advanced data cleaning techniques to enhance the accuracy and reliability of the Twitter dataset, ensuring its suitability focr further analyses
- Leveraged TextBlob and IBM watson NLP, powerful natural language processing tools, to perform sentiment analysis on the tweets, enabling the assessment of emotions expressed by users during the conflict
- Developed visually compelling data visualizations to depict the variations in cryptocurrency trends in response to people's emotions during the Russian-Ukraine War

NoSQL Injection detection in MongoDB using Machine Learning   (Jan 2023 - Apr 2023)
Technology: Python, Numpy, Scikit-Learn, Pandas, Matplotlib, Collab
- Conducted research to determine the most effective Machine Learning method for detecting injection attacks on MongoDB databases using the NoSQL injection dataset
- Comparison of performance of Logistic Regression, Decision Tree, Support Vector Machines, Naive Bayes, Gradient Boosting and Random Forest classifiers was done based on F1_Score, Recall, Precision and Accuracy, resulting in Random Forest being the best ML classifier for NoSQL injection detection in MongoDB

Diary Application ([Link](#)) (Nov 2022 - Dec 2022)
Technology: React, Node.js, CSS, HTML, MongoDB
- Developed a cutting-edge text editor using React JS, integrating visually appealing themes and a dark mode feature for an enhanced user experience
- Strengthened application security by implementing JWT token authentication, to safeguard user data and prevent unauthorized access
- Ensured top-level data protection through the implementation of robust password encryption techniques for secure storage of sensitive information in the database

Logistic Application (Aug 2021 - Dec 2021)
Technology: Javascript, React, CSS, HTML, Node.js, MongoDB
- Developed an application to efficiently manage logistics transportation between locations, ensuring seamless delivery of goods
- Implemented an integrated Google Maps feature, enabling real-time tracking of vehicles and providing users with the ability to monitor their items' status
- Generated comprehensive transaction details reports for each travel, enhancing data visibility and aiding in decision-making
- Leveraged Firebase push notifications to deliver timely updates to users, enhancing communication and providing up-to-date information on logistic goods
- Successfully implemented multi-language functionality and right-to-left (RTL) support, improving accessibility for diverse user bases
- Utilized service workers to enable notifications even when the website is inactive, enhancing user engagement and convenience

Speech-Text Converter ([Link](#)) (Mar 2020 - Apr 2020)
Technology: Java, Android Studio
- Proficiently utilized Android's built-in Text-to-Speech (TTS) engine to deliver seamless and interactive speech capabilities, enhancing user experience and accessibility
- Successfully integrated text-to-speech and speech recognition functionalities into diverse communication channels, including SMS, Email, and cross-application copying, empowering users to effortlessly communicate and interact with the app's content
- Proven ability to work independently and proactively, delivering results on time and exceeding project goals and expectations

Working Model of Self-driving Car (Jan 2020 - May 2020)
Technology: Python, Java, Tensor flow (Machine Learning), RPi, Arduino
- Proficiently designed and implemented a cutting-edge self-driving vehicle system, incorporating convolutional neural network (CNN) and shortest path algorithm to ensure safe and efficient navigation between destinations
- Successfully integrated Internet of Things (IoT) devices, including Raspberry Pi (RPI), to seamlessly control vehicle direction based on the robustly trained model, enhancing real-time decision-making capabilities
- Facilitated seamless integration of multiple systems by establishing TCP connections, fostering efficient communication and collaboration between interconnected components, thereby enhancing overall system performance

Life Source - Blood Bank Management System (Aug 2018 - Dec 2018)
Technology: Java, Android studio, HTML, CSS, Bootstrap
- Recognized for outstanding contribution to the field of healthcare technology by developing an innovative blood bank management system called "Life Source"
- Successfully integrated live location services into Android devices, enabling precise tracking and instant identification of nearby blood donors for hospitals in need
- Spearheaded the development of a cutting-edge blood bank management system, streamlining the donor network and enhancing response times during critical situations

EDUCATION

Master of Applied Computing (Sep 2022 - Dec 2023)
University of Windsor, Ontario

Bachelor of Technology (Honours), Computer Science (Aug 2016 - Jul 2020)
APJ Abdul Kalam Technological University, Kerala, India