Tirth Patel

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EDUCATION

Bachelor of Science, Major: Computer Science, University of Illinois, Chicago, GPA: 3.7/4.0
Minor: Mathematics

TECHNICAL SKILLS

Languages	C++, Java, Python, Ruby, Scala, JavaScript, PHP, F#
Frameworks/Libraries	NodeJs, Ruby on Rails, React, React Native, Flask, scikit-learn, Laravel
Databases	MySQL, PostgreSQL, MongoDB/NoSQL, Firebase
Tools and Technology	GCP, AWS, Azure, Kubernetes, Apache Kafka, Hadoop, JDBC, Postman, Spark, Git, Android Studio, Intellij
Relevant Coursework	Data Structure and Algorithms, Software Engineering, Database Systems, Android development, Systems Programming, Distributed Objects for Cloud Computing, Applied Statistical Methods, Algorithms

WORK EXPERIENCE

Software Engineer II (Fullstack)   **Feb 2022 — Present**
Clearsense LLC   Remote (Seattle)
- Created Personicle's agile backend and intuitive dashboard, using Ruby on Rails and React for data processing and visualization.
- Employed Python, Flask, SQLAlchemy and Ruby to build reliable high-performance API services leveraging JSON for data communication, ensuring seamless data processing with PostgreSQL database.
- Implemented a robust authentication system for Personicle by utilizing Okta OAuth 2, ensuring secure user authentication and access control for the application.
- Streamlined the deployment process and enhanced application scalability and reliability by automating the deployment of services to an Azure Kubernetes cluster using CI/CD pipelines, GIT, Jenkins and Docker resulting in **35%** reduction in application downtime.
- Created functional iOS prototype using React Native and Xcode, incorporating user feedback and iterative design processes.

Software Engineer   **Aug 2019 — Sep 2020**
University of Illinois, Department of Engineering Media Services   Chicago
- Upgraded a legacy access authorization system from PHP to Laravel, ensuring accurate tracking of room, building, and cabinet access for University of Illinois' College of Engineering affiliates, resulting in **100%** client satisfaction.

ACADEMIC PROJECTS

Streaming Log Data Pipeline – Project Link | Scala, Apache Kafka, Apache Spark, AWS MSK, Akka   **Dec 2021**
- Implemented an actor model service using Akka to ingest logfile generated data in real time.
- Delivered data to Kafka and then to Spark streaming for sophisticated analysis of data and notify stakeholders via an email in real time on finding relevant log messages.

Cloud Simulator – Project Link | Scala, Cloudsim, SBT   **Sept 2021**
- Created cloud simulators in Scala for evaluating executions of applications in cloud datacenters with different characteristics and deployment models.
- Simulations for different service models such as IaaS, PaaS, SaaS and FaaS were created and tested using ScalaTest.

Cloudgile – Project Link | React, Firebase, Node.js, Git, Jira   **Feb 2021 — May 2021**
- Collaborated and managed a team of 4 in an agile manner using Jira with weekly scrum meetings and product backlogs to make a cloud-based issue tracking application that allows agile project management for developers and managers.
- Constructed Firebase real time database to sync user data and update UI components.

Map Reduce Computational Model – Project Link | Hadoop, Scala, SBT, AWS EMR   **Oct 2021**
- Created multiple Mappers and Reducers using Apache Hadoop for distributed processing of log files and analysis of logs.
- Deployed the application to run on AWS Elastic Map Reduce.

Diabetes Prediction Model – Project Link | Python, Flask, scikit-learn   **Jun 2021 — Jul 2021**
- Prepared a diabetes onset prediction model using SVM machine learning algorithm with 77% accuracy.
- Incorporated the model in a web interface using Flask which classifies a patient as diabetic or non-diabetic based on the input.

Java Networked Baccarat Game – Project Link | Java, JavaFX, Maven   **Nov 2020 — Dec 2020**
- Followed TDD using JUnit to implement a networked multi-threaded version of Baccarat game following OOP principles.
- Used java.net package for socket programming to allow multiple users to connect to a server and play the game.

CERTIFICATIONS

2021	Google Cloud Platform Fundamentals: Core Infrastructure		**2021**	Learning Apache Kafka
2021	Essential Google Cloud Infrastructure: Foundation			