Kishore P

Email: prakis@gmail.com   Ph: +91-8008930960 LinkedIn:krishna-pagadala

Career Summary

- I have over 22 years of experience in Software Development and Design.
- Good understanding and experience in Object Oriented programming and Design Patterns.
- Expertise in Java, Go, C#, NodeJS, Python, Matlab, Spring, JavaFX, ReactJS.
- Hands-on experience in Kubernetes, AWS, Google Cloud, Firebase, Azure, Dockers.
- Expertise in Nano-technology and Microfabrication.

Awards:

- Award, Data analysis algorithm for Tektronix oscilloscopes USB Eye-Diagram
- SPOT Award for developing Edge-Finding Algorithm for Tektronix Oscilloscope EyeDiagram
- SUN CERTIFIED JAVA PROGRAMMER
- Mindtree Best Employee Award for the year 2009

Publications:

- Author: "Understanding Core Java". A Conceptual Guide to Java's Object-Oriented Programming Fundamentals.
- A platform to parallelize planar surfaces and control their spatial separation with nanometer resolution
  http://scitation.aip.org/content/aip/journal/rsi/83/10/10.1063/1.4754643

Education:

Bachelor of Science, Mathematics
Master of Computer Applications

Professional Accomplishments

Software Consultancy + PostOffice   **Mar 2024 – Now**

Working as a technical consultant for different companies like Cleo, GRL. PostOffice, very large scale data acquisition and storing framework for IOT, especially Renewable energy systems. Fully auto-scaled and plugin architecture for different input modules like Modbus, OPC, Influx Telegraf, Kafka, MQTT, AWS S3, other data persistence.

CloudPostOffice: Design and implement CloudPostOffice.

Senior Software Architect at Prescinto   **Jun 2022 – Jan 2024**

Responsibilities:
Designed and developed data acquisition, data processing and storing.

Cormatix Service IOT Edge: Optimized Cormatix IOT device to run on lower resource hardware like RaspberryPi. Converted HTTP/REST communication to bandwidth optimized MQTT protocol. Optimized data format to reduce bandwidth and resource consumption. Added additional support for protobuf format, HDF5 etc.

Optimized Cormatix IoT device: Optimized for low-resource hardware like Raspberry Pi. Switched from HTTP/REST to MQTT for bandwidth efficiency. Reduced resource, supported formats Protobuf, HDF5, etc.

Auto-scalable Kubernetes apps:Migrated legacy REST app to MQTT-based backend on Kubernetes. Enabled horizontal scaling for data processing. Set up CI/CD pipeline from GitHub Actions/Jenkins to multi-region Kubernetes. Ensured no data loss with auto-backup to Azure Blob.

FTP-AutoScaling: Converted legacy applications to auto-scalable FTP services to support 1000+ Plants and 10+ formats. Auto-backup, Secret management, state movement to highly efficient InMemory DB's.

TinyFunction: 2021

Founder: TinyFunction. Developed in browser AWS Lambda deployer for NodeJS, Python, Java, C#. Developed DataStructures to storage platform and internal messaging system. Developed custom AWS Lambda deployer to deploy other lambdas on-the-fly.

Software Architect at Granite River Labs(GRL)   **2018 – 2021**

Responsibilities:
Designed and developed data intensive web, desktop products.

Architect and Lead Developer for Wi-Fi Alliance: I worked as an architect of Wi-Fi Alliance (QuickTrack app). Managed a large team, using Java SpringBoot, Python, Encryption, ReactJS.

- Developed data analysis & web frontend for various protocol analyzers like GRL C2, C3
- Presenting complex data with responsive 2D charts and UI
- Implemented customized data extractions algorithms.

Independent Software Consultant   **2017**

As an architect I provided software design and developed services for web, desktop apps for GRL, Cleo, LNF. Worked on Google Cloud, Azure and AWS cloud architecture and cloud app development.

Technologies: AWS, GCP, Firebase, Dockers, NodeJS, Python, Java, SpringBoot, ReactJS

University of Michigan (Lurie Nanofabrication Facility)   **2012 – 2017**

- Developed data analyzers, control systems and custom framework for laboratories.
- Developed auto-installer/updater for remote clients.
- Implemented billing algorithm which greatly simplified reservation overlapping issues.

Technologies: Azure, AWS, C#, NET, Python, Java, NodeJS, AngularJS, Raspberry PI

University of Michigan   **2010 – 2012**
Research Scholar (Mechanical Engineering)

- Micro Fabrication for the study of Near Field and Thermal Conductivity.

MindTree Ltd (Aztec-soft)   **2007 – 2010**
Project: TomTom Device Home - Team Lead

Developed TomTom Device HOME application using pier to pier technology. Worked on a prototype for the route data analyses and error recognition software using Java, SpringBoot, GWT.

Project : PlasticJungle - Team Lead & UI Architect
Worked as UI lead for PlasticJungle.com, used Apache OFBiz, Java Struts, AWS.

Project: LRN - Team Lead
Migration of the LRN project from .NET framework to Python Django framework.

Project: Kontiki (Verisign) BBC iPlayer - Team Lead
Kontiki administration tool for BBC Media Publisher. C#, .NET Framework.

Gyan Labs   **2004 – 2006**
Project: CNC Profile Cutter Machine Controller

Implemented Computer-Numeric-Controller interfacing software with modules like Visual Designer, G-Code generator and Machine interfacing. Used Java, Swing, Python, C, AVR Micro-Controller.

Project : Textual Analytics Time processing module
Implemented BigData module for Time extraction from using Python & Regular Expressions.

Tektronix (Oscilloscope) Engineering India - Software Engineer   **2000 – 2004**

Projects: TEK-XGA, SOA for POWER, BlackHawk and Buzzsa, Jitter Timing Analysis Package, TDS Universal Serial Bus 2, TDS Communication and pulse measurement

Technologies: Core Java, Swing, C#, C, .NET framework.

- Developed applications for data analysis and real time display in Tektronix oscilloscopes
- Developed hardware for data acquisition, buffering, and display

Some of my opensource and side projects:
Git-Help HelloEle Watermark.ink Stringify.me KeyVal.org TinyFunction.com DataStructures.org

Jago Language: Currently developing a new programming language JaGo.