# Anwin Sen Padma

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## **Professional Summary**

Passionate software engineer with 13+ years of extensive experience in architecting and developing robust and scalable distributed systems for leading product companies. Proficient in backend development technologies such as Golang, Python, C++, Django Rest Framework, FastAPI, Kafka, Kubernetes, and Terraform. A proven track record of spearheading the design and development of multiple software product lines and collaborating closely with stakeholders and product managers to align technical solutions with strategic business objectives. Recognized for exceptional leadership skills in managing agile software product development teams and driving continuous improvement through CI/CD and test-driven development workflows.

### Core Skills

- Programming Languages: Golang, Python 3.8, C++, JavaScript
- Cloud Technologies: AWS (Lambda, API Gateway, ECS), Azure, Apache Kafka
- Frameworks: Django Rest Framework, FastAPI, Qt
- DevOps: Terraform, Gitlab pipeline, Jenkins, Docker, Kubernetes
- Database Systems: MongoDB Atlas, MySQL, PostgreSQL
- Collaboration Tools: Gitlab, Github, Jenkins, JIRA, Slack, Confluence
- *Testing:* Pytest, GTest
- Operating Systems: Linux, Windows, Android, MacOS
- Agile Methodologies: Scrum

# **Employment History**

#### **Senior Software Engineer**

May 2022 - present

Cradlepoint, Camberley, United Kingdom

- Led the design and development of highly scalable backend microservices using Golang, Python, C++, and RedisDB.
- Collaborate closely with stakeholders and product managers to define technical requirements, prioritize features, and ensure alignment with strategic business goals.
- Conduct code review sessions, enforce best development practices, and mentor junior engineers to maintain high code quality and foster a culture of technical excellence.
- Architect and implement 4G/5G LTE packet cores and protocol message handlers for RAN, AMF, MME, and UPF, ensuring compliance with industry standards and protocols.
- Design and implement a metrics framework to publish metrics topics into Kafka, facilitating real-time monitoring and performance optimization.

- Write Gitlab CI/CD pipeline scripts to automate code quality control, testing, and deployment processes.
- Utilize Kubernetes to deploy, scale, and manage docker containers, optimizing resource utilization and infrastructure efficiency.
- Implement Kafka publish-subscriber messaging system to achieve asynchronous communication between distributed Django REST framework microservices.

#### **Lead Backend Developer**

Nov 2021 - May 2022

Emperia Ltd, London, United Kingdom

- Led an agile scrum team in designing and developing scalable backend REST microservices using Python FastAPI framework and MongoDB Atlas database.
- Collaborate with stakeholders and product managers to gather requirements, provide technical insights, and ensure alignment with business objectives.
- Deploy AWS cloud infrastructure using Terraform IaC to AWS Lambda with Docker images from Amazon Elastic Container Registry, ensuring scalability, reliability, and cost-efficiency.
- Deploy Amazon API Gateway HTTP API and use Auth0 as a custom JWT authorizer to secure APIs and authenticate users.
- Achieve 95% code coverage with Pytest and implement CI/CD using Github Actions workflows, reducing time to market and improving software quality.
- Deploy Strapi Headless CMS using Azure App Service to streamline content management and delivery for web applications.

#### **Staff Software Engineer**

May 2013 - Nov 2021

Asteria Aerospace, Bangalore, India

- Led agile scrum software development teams in building cloud, desktop, and mobile solutions, emphasizing collaboration with stakeholders to define product roadmaps and prioritize features.
- Define and implement software team functional processes to improve efficiency, productivity, and software quality.
- Architect and develop microservices for drone data archival and analytics using Python FastAPI deployed on AWS Lambda and MongoDB, enabling real-time data processing and actionable insights.
- Develop microservices to receive and relay live sensor data over secure websockets, ensuring high reliability and low latency communication.
- Design and architect Windows and Android GUI drone ground control station applications using C++, Python, JavaScript, Qt, and Qt Quick, optimizing user experience and functionality.
- Develop an IoT deep learning embedded Linux application to classify objects from drone live video feed using Edge Azure Custom Vision and restream annotated video.
- Implement CI/CD and test-driven development using Jenkins and Github webhooks to automate software deployment and validation processes.

### **Software Developer**

**Dec 2011 - April 2013** 

VCreate Logic, Bangalore, India

- Work for the French client Sixense Soldata on construction sites risk mitigation application development.
- Develop a C++, Qt GUI Windows application that visualizes data as layers over geographical information systems from thousands of sensors.

## **Education and Qualification**

Bachelor of Technology in Computer Science and Engineering 2007 – 2011 Model Engineering College, Cochin University of Science and Technology, India

Class 12, English, Computer Science, Physics, Chemistry, Maths

Christ Nagar School, Kerala State Higher Secondary Board, India