

# Monishwaran.C

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 Chennai, Tamil Nadu, India

 AWS Cloud Practitioner Certified

## WORK EXPERIENCE

**Software Engineer**  
Bapon IT Services | Chennai, India

*December 2024 – Present*

- Developed and maintained multiple AI-powered applications including Hyr-Sense (AI interview platform), SenseScript (meeting transcription app), HRSuite (timesheet management), and SkillfulSense (skill assessment platform)
- Built 130+ RESTful API endpoints using FastAPI with Python, serving thousands of users across multiple products
- Implemented cloud recording functionality using Agora SDK, integrating with AWS services for seamless audio/video storage
- Designed and deployed microservices architecture using AWS Lambda functions, ECS Fargate, and API Gateway
- Integrated multiple payment gateways (Razorpay, Stripe) and authentication systems (AWS Cognito, Azure AD SSO)
- Optimized infrastructure costs and performed cost analysis to determine minimal user acquisition targets
- Achieved AWS Cloud Practitioner certification with 96.2% score

**Team Lead & Senior Odoo Developer**  
Jetzerp Private Limited | Karaikudi, India

*May 2023 – December 2024*

- Led a cross-functional team of 6 members (2 developers, 3 business analysts, 1 tester) delivering ERP solutions for manufacturing and automotive clients
- Developed custom Odoo modules for inventory management, purchase order automation, and quality control reporting
- Created automated data import systems using Zoho Books API integration with webhook endpoints, reducing manual processing time by 80%
- Successfully migrated Odoo 14 to Odoo 17 Community edition by developing custom migration scripts
- Performed platform upgrades including Ubuntu 16 to Ubuntu 22 migration with Python version management using pyenv
- Generated comprehensive business reports (inventory analysis, vendor success rates) using Python xlwt package
- Built FastAPI services integrated with mobile applications for real-time inventory tracking

**Flutter Developer**  
Jetzerp Private Limited | Karaikudi, India

*January 2023 – May 2023*

- Developed mobile applications for automotive and manufacturing industries using Flutter framework
- Created Inventory Checker app with barcode scanning functionality, directly integrated with Odoo ERP database
- Built Appraiser app for Autobuy (US-based car trading platform) with real-time lead tracking and communication features
- Implemented API integration, loading indicators, and responsive UI components following material design principles

## KEY PROJECTS

**SkillfulSense - AI-Powered Skill Assessment Platform**  
Technologies: FastAPI, MongoDB, AWS Lambda, Agora SDK, OpenAI GPT-4, AWS Polly, Razorpay/Stripe

- Developed comprehensive skill assessment platform with MCQ tests, coding challenges, and AI interviews
- Implemented real-time voice assistant using GPT-4.1 with web search capabilities for instant query resolution
- Integrated payment gateways for global and Indian markets with automated certificate generation
- Built decoupled microservices architecture across 6 Lambda functions for optimal scalability

**HRSuite - Enterprise Timesheet Management System**

Technologies: [FastAPI](#), [PostgreSQL](#), [SQLAlchemy](#), [AWS Cognito](#), [Azure AD](#), [AWS SES](#)

- Architected and developed 90+ API endpoints covering timesheet, leave management, attendance, and RBAC modules
- Implemented Single Sign-On (SSO) integration with organizational Azure Directory
- Built automated email notification system using AWS SES for workflow management

**Odoo ERP Migration & Custom Development**

Technologies: [Python](#), [PostgreSQL](#), [XML](#), [JavaScript](#), [Ubuntu](#), [AWS EC2](#)

- Led migration from Odoo 14 to Odoo 17 Community edition, developing custom migration scripts
- Created automated purchase order import system with Zoho Books API integration
- Developed inventory management modules with real-time mobile app synchronization
- Built comprehensive reporting system for inventory analysis and vendor performance metrics

**Invoice Processing Automation - TI Murugappa Group**

Technologies: [FastAPI](#), [SQLAlchemy](#), [OCR](#), [Oracle Database](#), [Python](#)

- Developed intelligent invoice processing system reducing manual data entry time by 90%
- Implemented OCR-based JSON parsing for automatic invoice data extraction
- Built machine learning pipeline for invoice type recognition and automatic field mapping
- Created web portal for manual processing of new invoice types with approval workflows

**Pipe Diameter Optimization Tool**

Technologies: [Python](#), [Pandas](#), [FastAPI](#), [AWS Lambda](#), [S3](#), [Route 53](#) | Live: [opti.mklabs.work](#)

- Developed web-based optimization tool for water distribution pipeline design
- Automated iterative diameter calculation process, achieving 80% optimization efficiency
- Built full-stack solution with Excel file processing and AWS cloud hosting

EDUCATION

**Bachelor of Engineering - Mechanical Engineering**

2019 – 2023

[ACGCET](#), [Karaikudi](#)

CGPA: 8.1/10

**Higher Secondary Certificate (HSC)**

2018 – 2019

[SVS Mat Hr Sec School](#), [Muthupet](#)

Percentage: 85%

**Secondary School Leaving Certificate (SSLC)**

2016 – 2017

[SVS Mat Hr Sec School](#), [Chennai](#)

Percentage: 97%

# TECHNICAL SKILLS

## Programming Languages

- **Python (Advanced)** - FastAPI, Django, Flask, SQLAlchemy, Pandas, Selenium
- **Dart/Flutter (Intermediate)** - Mobile app development, API integration
- **JavaScript (Intermediate)** - Frontend development, API integration
- **SQL (Advanced)** - PostgreSQL, MongoDB queries and optimization

## Cloud & DevOps

- **Amazon Web Services (AWS)** - Lambda, EC2, S3, API Gateway, ECS Fargate, Cognito, SES, SNS, Polly, Transcribe
- **Database Management** - PostgreSQL, MongoDB, Oracle Database
- **Version Control** - Git, GitHub
- **Linux/Ubuntu** - Server administration, SSH, Nginx configuration, systemd services

## Frameworks & Technologies

- **Backend Development** - FastAPI, RESTful APIs, Microservices Architecture
- **ERP Systems** - Odoo (Community & Enterprise), Custom module development
- **AI/ML Integration** - OpenAI GPT-4, Whisper, AWS AI services
- **Mobile Development** - Flutter, Firebase integration
- **Payment Integration** - Razorpay, Stripe payment gateways

## Integration & APIs

- **Third-party Integrations** - Zoho Books, Agora SDK, Alison Platform, Azure AD
- **Authentication** - AWS Cognito, SSO implementation, OAuth
- **Real-time Communication** - WebRTC, voice/video calling, cloud recording

## Business & Domain Knowledge

- **ERP Modules** - Sales, CRM, Manufacturing, Inventory, Accounting, Purchase Management
- **Project Management** - Team leadership, cross-functional collaboration
- **Cost Optimization** - Infrastructure cost analysis and optimization strategies