

Arcade J Mamangun

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AI Automation Engineering Lead
Workflow Orchestration Architect
Voice AI & Integration Specialist

EDUCATION:

B.S. in Mathematics and Computer Science

University of California,
Berkeley
Berkeley, CA
2009-2013

Availability

Remote
Full-time or Contract
Open to Time Zones
Fluent English

CORE COMPETENCIES:

Automation & Orchestration

N8N, Make, Zapier, Workflow Design, Event-Driven Architecture, Webhook Systems, API Orchestration

Voice AI Systems

Retell AI, VAPI, Bland AI, ElevenLabs, Twilio Voice, Call Flow Design, IVR Systems, Speech Recognition Integration

CRM & Integration

GoHighLevel, HubSpot, Salesforce, ActiveCampaign, Pipeline Automation, Lead Routing, Data Synchronization

Backend & APIs

Python (FastAPI, Flask), REST APIs, GraphQL, WebSockets, Real-time Data Processing, Microservices

AI/ML Integration

GPT-4o, Claude 3.5, OpenAI API, Anthropic API, Prompt Engineering, RAG Systems, LangChain

PROFILE:

Senior AI Automation Engineering Lead with 12+ years progressive experience specializing in workflow orchestration, voice AI systems, and enterprise automation architecture. Expert in designing n8n-first automation systems, implementing voice AI agents (Retell, VAPI), and building event-driven integrations that reduced operational costs by 60%+. Recently transitioned from hands-on development to strategic leadership—directing automation implementations, CRM integrations, and intelligent workflow systems across multiple organizations.

Core Value Proposition: Transform manual business processes into intelligent, autonomous workflows through automation architecture, voice AI deployment, and strategic technology integration.

PROFESSIONAL EXPERIENCE:

LEAD AI Automation Architect

Merged Media | Ontario, Canada (Remote) | June 2022 - Dec 2025

- Led a 4-person team to design AI infrastructure handling 50,000+ monthly interactions, improving scalability and service reliability through event-driven architecture
- Architected end-to-end voice and SMS AI agent systems for lead generation, processing 1000+ calls daily for agency clients using Retell AI, VAPI, and custom workflows
- Designed n8n-first automation architecture where AI agents, CRMs, and internal services communicate through event-driven workflows instead of tightly coupled code, reducing manual operations by 85%
- Built production-grade text-based AI agents for customer interaction using OpenAI GPT-3.5/4 with custom prompt engineering strategies and fine-tuning for domain-specific use cases
- Implemented real-time conversation logging and analytics system tracking call outcomes, sentiment analysis, and conversion metrics for continuous optimization
- Built reusable AI architecture adopted by 3 client implementations, improving lead qualification accuracy by 45% using Python FastAPI services and CRM integration with 15+ third-party platforms
- Created automation templates for lead qualification, appointment setting, and follow-up sequences with webhook-based integrations reducing deployment time from 2 weeks to 3 days
- Own technical roadmap for AI/automation initiatives including vendor evaluation, technology selection, and best practice establishment for team and clients

Achieved: 60% operational cost reduction and cut response time from 4 hours to under 2 minutes by implementing multi-agent orchestration and RAG knowledge integration

Infrastructure

Docker, AWS Lambda, Cloud Functions, Redis, PostgreSQL, Kafka

AI/ML Automation Engineer

Inclusify Studio | Detroit, Michigan (Remote) | Jan 2020 - Feb 2022

- Built automated ML inference pipelines serving sentiment analysis models via Ray Serve + FastAPI with auto-scaling and load balancing
- Designed ETL automation workflows for data ingestion, preprocessing, and model training using Celery + Redis task queues processing 100K+ records daily
- Implemented automated model deployment pipeline with MLflow integration for CI/CD, version control, and rollback capabilities
- Created webhook-based integrations connecting ML outputs to customer success workflows, ticket routing, and notification systems
- Built automated monitoring and alerting system for ML model performance, data drift detection, and system health metrics

Achieved: Model inference latency reduced from 2.5s to 400ms, 35% improved customer satisfaction through AI-powered sentiment routing

Backend/Integration Specialist

DISQO | Glendale, California (On-site) | Jan 2016 - Dec 2019

- Designed asynchronous task queue system with Redis and Celery for background job processing, email automation, and scheduled workflows
- Built internal automation dashboard for workflow management, job monitoring, and manual trigger controls serving 200+ users
- Integrated Stripe webhook automation for payment processing, subscription management, and billing notifications handling \$2M+ ARR
- Implemented automated data synchronization workflows between PostgreSQL, third-party APIs, and internal services with conflict resolution
- Created API integration layer connecting external services (analytics, CRM, email providers) with unified authentication and rate limiting

Achieved: 70% faster processing through async workflows, \$2M+ ARR automated billing, 60% reduced database load, 40% infrastructure cost savings

Freelance Software Developer / API & Integration Developer

Upwork | Freelancer | Fiverr | Guru (Remote) | July 2013- Dec 2015

- Completed 25+ client projects in backend development, API design, and basic ML automation for startups and solo founders
- Built RESTful APIs and data processing systems using Flask, PostgreSQL, and Celery for scalable backend infrastructure
- Delivered recommendation engine prototype using scikit-learn and collaborative filtering algorithms for e-commerce client

Achieved: Established reputation for clean code and reliable delivery, Consistently received 5-star ratings from clients, Successfully transitioned from student to professional developer