

## ALEXANDRA CHEN

Senior Product Engineer (Backend) | AI/ML Specialist  
Email: alexandra.chen@example.com | Phone: +1-555-0123  
LinkedIn: linkedin.com/in/alexandrachen | GitHub: github.com/alexandrachen  
Location: Remote | Portfolio: alexandrachen.dev

## PROFESSIONAL SUMMARY

Senior Backend Engineer with 8+ years of extensive experience building scalable, high-performance systems.  
Expert in Node.js, Python, and modern cloud architectures with deep focus on AI-powered systems.  
Led multiple successful implementations of RAG systems, LLM chaining, and vector databases.  
Passionate about clean code, TDD, and mentoring engineering teams to build robust, production-ready applications.

## TECHNICAL SKILLS

### Backend Languages & Frameworks:

- Node.js (Expert) | TypeScript | Express.js | NestJS | Fastify
- Python (Expert) | Django | Django REST Framework | FastAPI
- Ruby on Rails | Java Spring Boot | Go

### Database Technologies:

- PostgreSQL (Expert) | MySQL (Expert) | MongoDB (Expert) | Redis
- Elasticsearch | ChromaDB | Pinecone | Qdrant | Weaviate
- Database Schema Design | Query Optimization | Indexing Strategies

### Cloud & DevOps:

- AWS (Solutions Architect Professional Certified)
- Google Cloud Platform (Professional Certified)
- Azure (Fundamentals Certified)
- Docker | Kubernetes | Terraform | CI/CD Pipelines
- Serverless Architecture | Microservices

### APIs & Integration:

- RESTful APIs (Expert) | GraphQL | gRPC | WebSockets
- API Design | Authentication (JWT, OAuth2.0) | Rate Limiting
- Third-party API Integration | Webhook Development

### AI/ML Technologies:

- OpenAI GPT-4 | Google Gemini | Anthropic Claude
- LangChain | LlamaIndex | Vector Databases
- Prompt Engineering | Fine-tuning | Embeddings
- RAG Implementation | LLM Chaining | AI Workflow Orchestration

## PROFESSIONAL EXPERIENCE

### SENIOR BACKEND ENGINEER | TechCorp Inc. | San Francisco, CA

January 2020 - Present (4 years, 10 months)

- Architected and led development of microservices platform handling 10M+ daily requests
- Designed and implemented comprehensive RAG system using ChromaDB and OpenAI embeddings
- Built sophisticated LLM chaining workflows for automated content generation and analysis
- Led migration from monolithic to microservices architecture, reducing deployment time by 80%
- Implemented comprehensive error handling and circuit breaker patterns for AI services
- Mentored team of 6 engineers, conducted code reviews, established best practices
- Achieved 99.9% uptime through robust monitoring and automated scaling

### BACKEND ENGINEER | DataFlow Systems | Austin, TX

June 2017 - December 2019 (2.5 years)

- Developed and scaled RESTful APIs using Django and PostgreSQL serving 1M+ users
- Built real-time data processing pipeline using Kafka and Redis (100K+ events/second)
- Implemented comprehensive testing suite, increasing code coverage from 60% to 95%
- Optimized database queries reducing response times by 60%
- Led integration of AI-powered features using OpenAI APIs
- Collaborated with frontend team using Agile methodology, 2-week sprints

### SOFTWARE ENGINEER | StartupXYZ | Boston, MA

June 2015 - May 2017 (2 years)

- Built backend services using Node.js and MongoDB for e-commerce platform
- Implemented JWT-based user authentication and authorization systems
- Developed RESTful APIs consumed by mobile and web applications
- Participated in full product lifecycle from conception to deployment
- Introduced automated testing and CI/CD practices

## KEY ACHIEVEMENTS & IMPACT

### AI/ML Innovations:

- Led development of AI-powered document analysis system adopted by 3 Fortune 500 companies
- Built custom RAG implementation improving search accuracy by 40% over traditional methods
- Created LLM chaining platform for automated content generation, reducing manual effort by 70%
- Designed vector database architecture supporting 50M+ embeddings with sub-100ms query times

### Technical Leadership:

- Architected scalable microservices system handling 10x traffic growth without downtime
- Implemented comprehensive monitoring and alerting, reducing incident response time by 90%
- Led migration to cloud infrastructure, reducing infrastructure costs by 40%
- Established engineering best practices and coding standards adopted company-wide

### Open Source & Community:

- Active contributor to LangChain with 1K+ GitHub stars on AI/ML projects
- Published 15+ technical articles on LLM chaining, RAG, and prompt engineering (100K+ readers)
- Regular speaker at AI/ML conferences and tech meetups
- Maintainer of popular open-source vector database tools

## EDUCATION & CERTIFICATIONS

### BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Stanford University | Stanford, CA  
Graduated: June 2015 | GPA: 3.9/4.0

### PROFESSIONAL CERTIFICATIONS:

- AWS Certified Solutions Architect - Professional (2023)
- Google Cloud Professional Cloud Developer (2022)
- Microsoft Certified: Azure Solutions Architect Expert (2023)
- OpenAI API Developer Certification (2023)
- Certified Kubernetes Administrator (CKA) (2023)

## TECHNICAL PROJECTS

1. Enterprise RAG Platform (2023)
  - Built comprehensive RAG system with ChromaDB, OpenAI, and custom embeddings
  - Implemented intelligent context retrieval and ranking algorithms
  - Achieved 45% improvement in information retrieval accuracy
  - Deployed at scale serving 1M+ queries per day
2. AI-Powered Content Generation System (2022)
  - Designed LLM chaining architecture for automated content creation
  - Implemented prompt engineering framework with template management
  - Built quality control and validation layers for AI-generated content
  - Reduced content production time by 75%
3. Real-Time Analytics Pipeline (2021)
  - Developed scalable data processing using Kafka, Redis, and PostgreSQL
  - Implemented complex event processing and aggregation algorithms
  - Built real-time dashboard with WebSocket updates
  - Processed 10B+ events per month with 99.99% accuracy

## LEADERSHIP & COLLABORATION

- **Technical Leadership**: Led backend engineering team of 6 engineers, mentored junior developers
- **Cross-functional Collaboration**: Worked closely with product managers, designers, and data scientists
- **Knowledge Sharing**: Conducted regular tech talks, created comprehensive documentation

- **Agile Methodology**: Scrum Master experience, facilitated sprint planning and retrospectives
- **Communication**: Clear technical communication with both technical and non-technical stakeholders

#### INTERESTS & PASSIONS

- AI/ML research and implementation, particularly in production systems
- Building scalable, resilient backend architectures
- Open source contribution and community engagement
- Mentoring and developing engineering talent
- Technical writing and knowledge sharing