

# Serge D.

## Senior Senior AI Engineer

### SUMMARY

- Senior AI Engineer with 11+ years of experience in software development and intelligent systems;
- Experience in building Retrieval-Augmented Generation (RAG) pipelines using OpenAI, Mistral, and Azure AI stack (Cognitive Search, AI Speech);
- Skilled in developing an AI voice/chatbot builder with RAG support, knowledge base retrieval, and CRM synchronization;
- Experienced in Integrated conversational agents with Twilio, Genesys Cloud CX, and Zoho CRM for end-to-end automation;
- Designed multi-agent flows using FlowiseAI, Agentflows, Vector Stores, and Memory Nodes;
- Good abilities in backend development with Python, .NET, and Node.js for scalable service integration;
- Experienced in front-end development with JavaScript (ES6+), React, Angular, and Vue.js;
- Skilled in delivering cloud-native microservices across AWS and Azure, using Docker, CI/CD, and automation tools;
- Led feature implementation and mentoring in long-term publishing and analytics systems.

### TECHNICAL SKILLS

<b>Main Technical Skills</b>	Python, Generative AI, RAG, Azure
<b>Programming Languages</b>	C, C#, C++, JavaScript, PHP, Python, TypeScript
<b>AI &amp; Machine Learning</b>	AI-agents, Azure AI Search, Azure AI Studio, Azure Cognitive Search, Flowise, LSTM, Mistral AI, OpenAI, RAG, RAGFlow
<b>UI Frameworks, Libraries, and Browsers</b>	Ajax, CSS, HTML5, Socket.io, XML
<b>.NET Platform</b>	Azure, .NET
<b>JavaScript Frameworks</b>	Express, Next.js, Node.js, React, Vue Storefront
<b>JavaScript Libraries and Tools</b>	Grunt, Webpack
<b>PHP Frameworks</b>	Laravel, Zend, Zend Framework 3
<b>Java Libraries and Tools</b>	OpenJDK

<b>PHP Libraries and Tools</b>	PhpStorm
<b>Data Analysis and Visualization Technologies</b>	Apache Airflow
<b>Databases &amp; Management Systems / ORM</b>	AWS ElasticSearch, Cosmos DB, MongoDB, Mongoose ORM, MySQL
<b>Cloud Platforms, Services &amp; Computing</b>	AWS, Azure, GCP, Genesys Cloud CX, Zoho
<b>Amazon Web Services</b>	Amazon EventBridge, AWS Cloudformation, AWS CloudFront, AWS CodeDeploy, AWS ElasticSearch, AWS Lambda, AWS S3, AWS SAM, AWS SES (Amazon Simple Email Service), AWS SNS, Serverless Framework
<b>Azure Cloud Services</b>	Azure Cognitive Search, Cosmos DB, Microsoft Azure API
<b>Web/App Servers, Middleware</b>	Apache HTTP Server
<b>SDK / API and Integrations</b>	Api Gateway, Microsoft Azure API, RESTful API, Runscope, Twilio
<b>QA, Test Automation, Security</b>	Browserstack, Jest, Postman
<b>Deployment, CI/CD &amp; Administration</b>	CI/CD, GitLab CI, Travis CI
<b>Virtualization, Containers and Orchestration</b>	Docker, Vagrant
<b>Third Party Tools / IDEs / SDK / Services</b>	Eclipse, IntelliJ IDEA, Microsoft Visual Studio Code, PhpStorm
<b>Version Control</b>	Git, GitHub, GitLab
<b>Platforms</b>	Magento
<b>Methodologies, Paradigms and Patterns</b>	microservices
<b>Message/Queue/ Task Brokers</b>	RabbitMQ



## WORK EXPERIENCE

### Developer, NDA Project

**Duration:** 2024-2025

**Summary:** Developed an AI chatbot and voicebot builder platform to improve customer engagement and automate interactions across chat and voice channels. The platform utilized Retrieval-Augmented Generation (RAG) with LLMs for context-aware conversations. It featured customizable LLM selection, integration of knowledge bases, and seamless CRM synchronization. Technologies used included GenAI, Flowise, Twilio, and cloud infrastructure on AWS (Amazon Bedrock, Kendra, AWS Lambda + Step Functions).

#### Responsibilities:

- Built a scalable chatbot builder application hosted on AWS with dynamic flow configuration;
- Created intelligent chatbot and voice bot flows using Flowise and Twilio, incorporating LLM capabilities with RAG pipelines for document-grounded responses;
- Integrated with third-party CRMs, enabling storage of conversation outputs and automated follow-ups based on RAG-enhanced understanding;
- Leveraged RAG to retrieve relevant knowledge base entries, resulting in more precise and context-aware interactions, reducing fallback rates by 30%.
- Designed and fine-tuned prompts for GenAI models to address diverse customer scenarios with accurate, adaptive responses.

**Technologies:** GenAI, Flowise, Twilio, AWS (Amazon Bedrock, Kendra, AWS Lambda + Step Functions).

### Developer, NDA Project

**Duration:** 2023-2024

**Summary:** AI Assistant for contact center.

#### Responsibilities:

- Development of AI assistant features leveraging LLM for summarization and other generative tasks;
- Building Agent flows for automation of repetitive agent tasks;
- Integration with 3rd party services (CRMs, knowledge base).

### Professional service engineer, Comprehensive Case Management Platform

**Duration:** March 2022- 2023

**Summary:** Comprehensive, enterprise-grade application platform for case management solutions, bringing together information, processes, and people for Investigative, Service Request, Incident Management, and Process-to-Decision-like use cases. AppBase puts full control into the business user to adapt to changes in daily processes and rapidly adapt to new policies and regulations.

#### Responsibilities:

- Provide support for existing customers who use Genesys Cloud.



- Configure Eccentex CRM and Genesys Cloud for customer service solutions.
- Contact center reporting;
- Deploy the Eccentex AppFoundry Premium App for Genesys Cloud to customers.
- Architect development.

**Technologies:** Genesys Cloud, Eccentex CRM, AppFoundry Premium App.

### **.NET Developer, Integration AppBase DCM with PureCloud**

**Duration:** Apr 2021 - Oct 2023

**Summary:** Integrating Eccentex AppBase DCM with PureCloud

#### **Responsibilities:**

- Developing custom services (middleware) to communicate with PureCloud;
- Configuring AppBase DCM to display pages inside PureCloud interfaces.

**Technologies:** Eccentex AppBase DCM, PureCloud.

### **Software Engineer, Web Application Development**

**Duration:** Oct 2019 - March 2021

**Summary:** As part of this project, I developed a web application focused on real-time data management and processing, using the technology stack of JavaScript, SQL, and .NET.

#### **Responsibilities:**

- Development of a dynamic user interface using JavaScript with React/Angular/Vue.js;
- Building a REST API on the .NET platform for handling requests and business logic;
- Working with a relational SQL database, optimizing queries and data operations.

**Technologies:** JavaScript, SQL, .NET, React/Angular/Vue.js.

### **Full Stack developer, Agent AI assistant & chatbot for Zoho CRM**

**Duration:** Jan 2018 - Sep 2019

**Summary:** Agent AI assistant & chatbot for Zoho CRM.

#### **Responsibilities:**

- Integration of Zoho and Genesys;
- Development;
- Definition of technical requirements.
- Code quality control.

**Technologies:** Zoho CRM, Genesys.

### **Full Stack developer, Storied Cloud Publishing System**

**Duration:** July 2015 – Present



**Summary:** A project of the Storied Cloud Publishing System, which includes Storied Studio, Storied Marketplace, Storied Analytics and Storied Data, together which allow to, among other things create and publish interactive content experiences including magazines, brochures, catalogues and more experiences; create pages that aggregate and present the experiences alongside feeds of content including social media posts using content hubs; integrate commerce functionality within the experiences; use analytical tools to measure engagement within the experiences and the content hubs.

### **Responsibilities:**

- Implementing new features;
- Participating in developing and maintaining project microservices;
- Planning and estimation of feature development;
- Mentoring other team members.

**Technologies:** Zend Framework, JavaScript, Node.js, AWS, MySQL, jQuery, CKEditor, RabbitMQ, ImageMagick, FFmpeg, OpenJDK, Docker, Azure AI stack, OpenAI, Mistral, Python, and C#.

### **Full Stack developer, Web Application Development**

**Duration:** July 2021 – Present

**Summary:** Web application.

### **Responsibilities:**

- Project maintenance;
- Implementing new features;
- Development web application.

**Technologies:** Zend Framework 3, JavaScript, MySQL, Gulp.

## **EDUCATION**

### **State Engineering Academy Computer and Information Technology Department**

Bachelor of Computer Science (2014)

### **Computer Software Technician, Engineering College of State Engineering Academy (2012)**

## **Certifications**

- Genesys Cloud CX: Architect Certification (2024)
- Genesys Cloud CX: Developer Certification (2023)
- Modern React with Redux (2018)
- The Complete Node.js Developer Course (2nd Edition) (2018)

