

Maksym Panibratenko

San Diego, CA | +1-(650)-996-0079 | maksym@panibrat.com
<http://www.linkedin.com/in/panibrat>

SUMMARY

Senior backend and distributed systems engineer with experience building large-scale production systems at Amazon and Google. I specialize in designing data-intensive platforms, event-driven architectures, and cloud-native services.

Currently focused on applying LLMs and agentic architectures (RAG pipelines, tool-using agents, and workflow automation) to build intelligent products that integrate deeply with company data and user workflows.

SKILLS

Model Context Protocol (MCP) | Retrieval-Augmented Generation (RAG) | LLM Orchestration | AWS (CDK, Lambda, SQS, S3, DynamoDB, RDS) | Kafka | Redis | PostgreSQL | Java | Python | Docker | Linux

EXPERIENCE

Amazon.com, Remote/San Diego, CA

May 2021 - April 2026

Software Development Engineer

Supply Chain Optimization Technologies (SCOT) organization is responsible for automating global inbound logistics and inventory placement logic, reducing operational costs and improving delivery speed for millions of shipments.

- Led the system design for an agentic customer assistant, defining the architecture for multi-agent orchestration and implementing the API layer as a MCP-compatible server to enable and standardize tool-calling and context-sharing across services.
- Expanded internal MCP server functionality with specialized tools for real-time shipment data retrieval. Utilized a TDD approach to implement sophisticated context management logic, including pagination and response compaction, optimizing data density and reasoning accuracy within LLM token constraints.
- Engineered a high-scale visibility platform for Advanced Shipping Notice (ASN) defects, streamlining pre- and post-receive anomaly detection. Developed a custom multi-dimensional feature-toggling framework to manage granular rollouts (by vendor, region, and defect type) and established automated data processing pipelines for real-time reporting.
- Directed the greenfield development of a cross-functional visibility system to ensure compliance with critical European shipping regulations. Orchestrated the technical roadmap across multiple teams, from API contract definition to regional deployment, ensuring 100% regulatory adherence under a restricted timeline.
- Delivered a cross-team vendor experience solution that optimized shipment pickup and delivery workflows, resulting in a 20% reduction in scheduling-related defects and significantly increasing operational throughput.
- Provided on-call production support for mission-critical distributed services powering inbound shipment workflows used by 100K+ daily active vendors globally, ensuring reliability and rapid incident resolution.

Verizon via EPAM Systems Inc, Remote

November 2020 - May 2021

Lead Software Engineer

Developed Verizon's Intelligent Lighting IoT platform, enabling remote monitoring, adaptive dimming, and real-time fault detection for municipal LED networks.

- Expanded existing platform functionality by developing new microservices to enhance system scalability and maintainability.
- Worked with cross-functional teams to ensure seamless integration of new features.

Caterpillar via Motion Recruitment, Remote

May 2020 - November 2020

Senior Software Engineer

Architected and scaled high-throughput pipelines to process real-time IoT events for the automated monitoring and predictive maintenance of global autonomous vehicle fleets.

- Delivered architectural guidance and led the development of multiple event-driven notification features.

Hyatt Hotels Corporation, Chicago, IL

March 2019 - June 2020

Senior Software Architect

Architected a high-throughput event-driven pipeline replacing legacy integrations between Hyatt's booking platform and on-premise property management systems.

- Developed a strategic plan for transitioning to an event-driven architecture.
- Designed and developed scalable services for integrating vendor property management systems.
- Implemented a proof-of-concept solution for the American Airlines partnership program.

Google via EPAM Systems Inc, Mountain View, CA

May 2018 - December 2018

Senior Software Engineer, May 2018 - December 2018

Software Engineer in Test (SET) team within the Google Play Store org, focusing on improving engineering velocity.

- Built automation tools for validating complex end-to-end user flows and backend integrations within Google Play.
- Reduced tests execution time by 8% by addressing race condition during test initialization.

Senior Systems Engineer, May 2015 - May 2018

Technical Solutions Engineer (TSE) for Google Workspace, providing deep-dive troubleshooting for complex enterprise issues and building automation tools and scripts to improve the product.

- Handled the most critical and complex customer issues that cannot be resolved by Tier 1 or Tier 2 support, managing them through to full resolution or bug fix implementation.
- Acted as a subject matter expert for internal stakeholders (Product Management and Software Engineering) to advocate for customer needs and influence the product roadmap based on recurring technical friction points.

Bandwidth via CyberVision Inc, Kyiv, Ukraine

December 2013 - May 2015

Software Engineer

Built automated tools for businesses to order, port, and manage millions of phone numbers globally via a dashboard or API.

- Engineered proof-of-concept cloud-based applications for telecommunication services.
- Developed a custom monitoring framework to ensure desired system availability.

Barclays Capital via EPAM Systems, Kyiv, Ukraine

May 2012 - November 2013

Systems Engineer

Member of Unix Production Operations (ProdOps) team at Barclays Capital, providing the 24/7 stability and maintenance of the bank's massive proprietary server estate.

- Serving as the second line of defense for resolving complex hardware and software issues across 20K+ hosts.
- Executing routine hardware/software health checks, log analysis, and system patching to identify potential failures before they impact the front office.
- Leading root-cause analysis (RCA) for production outages and managing the lifecycle of incidents using ITIL standards.
- Monitoring system performance and resource utilization (CPU, memory, storage) to ensure server platforms can handle high-volume market events.

EDUCATION

Master of Science Radio Engineering

Igor Sikorsky Kyiv Polytechnic Institute, Ukraine