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Top Skills

Claude Skills
Anthropic Claude
Technical Documentation

Languages

English

Certifications

Building with the Claude API
Introduction to Model Context Protocol
Model Context Protocol: Advanced Topics
Certificate of completion: AI Fluency for students
Certificate of Completion: AI Fluency Framework & Foundations

Bryan Thompson

Integration QA @ Anthropic | Building MCP Review Infrastructure | 13 Years Enterprise Systems (PayPal/Fiserv)
Madison, Mississippi, United States

Summary

Bringing 13 Years of Enterprise Systems Discipline to AI Infrastructure EngineeringAt Anthropic, I architect infrastructure for AI developer ecosystems. Built in 8 weeks: 26,000+ lines automation (33 commands, 14 agents, 8 hooks), 70-step compliance framework processing 80% review delays, 99% platform optimization (178MB→228KB), sub-3-hour CVE response. CURRENT (Anthropic)Platform: UV runtime optimization (99% reduction), native module compatibility, cross-OS deployment, manifest evolutionSecurity: CVE-2025-53110 (2.5h), compliance automation (70 steps, 30+ requirements), threat modeling Infrastructure: 33 commands, 14 agents, 8 hooks, schema-aware testing (94.1% vs 64.7%, 46% improvement)Cross-Product: 35+ assessments, Skills ecosystem QA, healthcare integration prep, architecture consultationTools: Pre-submission questionnaires (80% delay reduction), 16 lessons-learned, 325KB docs EVOLUTION2024 Transition: Built AI platform (triepod.ai)—Research Cycle™ (85% accuracy), multi-DB orchestration (300% throughput), MCP (92% token optimization), 500+ hours focused learning. Applied AI to finance (Lodestar)—semantic matching (80% manual reduction), MCP servers (<500ms), LLM-ETL (65% integrity improvement), SOC2/PCI compliant.2019-2024 Foundation: PayPal—SAP integration, automated validation, decision trees (25% gain). Fiserv—DNA CCM SME (50+ engineers), Python/SQL automation (60% ops reduction), 99.5% reliability, diagnostics (40% faster). DIFFERENTIATORMost AI engineers come from software. I bring operational discipline from regulated environments where downtime has financial consequences. CVE response muscle memory, 70-step compliance frameworks, 99.5% reliability targets, hands-on development (triepod.ai). Result: Infrastructure that scales, handles failure gracefully, maintains compliance, enables developers. STACKAI: Python, TypeScript, MCP, Neo4j, ChromaDB, Qdrant, PostgreSQL, Docker, FastAPI, LLM Orchestration (Claude/OpenAI/local)Enterprise: SQL, SAP, Fiserv DNA, ETL, Job Scheduling,

Process AutomationSpecialty: Vector DB optimization, semantic search, RAG, prompt engineering, schema-aware generation, platform observabilityCurrently: Anthropic (AI Infrastructure) | Previously: PayPal, Fiserv (13 years) | Transition: triepod.ai, Lodestar (2024)Systematic engineering discipline meets bleeding-edge AI innovation. Building reliability into systems that didn't exist two years ago using patterns refined over 13 years where failure isn't an option.

Experience

Anthropic

Integration Quality Assurance | Business Operations | MCP Ecosystem Infrastructure Engineer

October 2025 - Present (4 months)

United States

Infrastructure & Automation Engineering

Built production-grade review platform: 33 slash commands, 14 agents, 8 observability hooks, 70-step compliance framework—26,000+ lines across 96+ files processing 80% of delays. Observability: Voice announcements, JSONL logging, transcript archival. Testing: Schema-aware generation (46% improvement), 6-category taxonomy. Knowledge base: 16 lessons-learned documents.

Platform Engineering & Optimization

UV runtime optimization: 99% size reduction (178MB → 228KB) solving Python portability. Reference implementations for Claude Desktop features. Platform compatibility across operating systems. MCPB specification evolution (manifest v0.1 → 0.3).

Cross-Product Assessment & Architecture

50+ MCP server audits, Skills ecosystem QA, healthcare/life sciences integration prep. Architecture consultation: Embedded servers, local/remote routing, OAuth patterns. Discovered native module incompatibility affecting 25-30% of submissions. 100% recent test pass rate.

Security & Platform Contributions

CVE-2025-53110 response: 2.5h turnaround with production fix. Platform debugging: Native modules (Prisma, SQLite, AWS), OAuth validation, runtime environments. Security testing frameworks for third-party integrations.

Developer Enablement
Documentation-first guidance, failure pattern libraries, self-correction frameworks, pre-submission questionnaires (80% delay reduction). Professional communication templates maintaining standards while enabling developer success.

triepod.ai

AI Research Platform Developer | Founder
March 2024 - October 2025 (1 year 8 months)

Architecting next-generation AI research platform combining 10+ years systems expertise with cutting-edge AI/ML innovation.

Repo: https://github.com/triepod-ai

CORE PLATFORM ACHIEVEMENTS
- Engineered multi-database AI architecture integrating Neo4j knowledge graphs, ChromaDB sequential reasoning, and Qdrant semantic search - achieving 300% throughput improvement in vector operations
- Developed proprietary Research Cycle™ framework (INIT/CREATE/ANALYZE) delivering 85% accuracy in complex analytical workflows
- Built production-grade LLM orchestration supporting Claude, OpenAI, and local models with automatic failover and 99.8% uptime
- Pioneered Model Context Protocol (MCP) implementations achieving 92% token optimization - among first developers in this space

TECHNICAL INNOVATIONS
- Advanced RAG system with multi-dimensional relevance scoring and semantic chunking for 42K+ document processing
- Platform-plugin architecture with contract-based interfaces enabling 40% faster component integration
- Enterprise-grade error handling with exponential backoff, retry mechanisms, and comprehensive observability
- Custom vector database optimizations achieving sub-millisecond query response times at scale

BUSINESS IMPACT
- Self-directed transition from systems architecture to AI/ML engineering through 500+ hours focused learning
- Building commercial AI research acceleration tools with active pilot programs

- Open-source contributions to MCP ecosystem and vector database optimization patterns
- Technical foundation enables enterprises to implement AI with production-ready reliability

Technologies: Python, TypeScript, Neo4j, ChromaDB, Qdrant, OpenAI API, Claude API, Docker, FastAPI, LangChain

Lodestar Technologies Inc.

Business Merger Analyst | Data Integration Specialist | Financial Systems Developer

June 2024 - August 2025 (1 year 3 months)

AI-powered transformation of financial data integration for enterprise banking mergers and acquisitions.

AI/ML PLATFORM DEVELOPMENT

- Architected Python-based financial integration platform with semantic matching algorithms - achieving 80% reduction in manual processing while maintaining SOC2/PCI compliance
- Pioneered custom Model Context Protocol (MCP) servers in TypeScript with JSON-RPC, delivering <500ms response times and 92% token optimization
- Built multi-database orchestration integrating PostgreSQL, vector stores (ChromaDB/Qdrant), and Neo4j graphs for real-time financial data processing
- Implemented LLM-powered ETL pipelines with decision trees, improving data integrity by 65% through intelligent validation

AI STRATEGY & INNOVATION

- Transformed Business Analyst expertise into advanced prompt engineering, creating production LLM workflows with 85% accuracy in automated process identification
- Developed AI documentation frameworks translating complex financial requirements into actionable LLM instructions
- Designed intelligent prompt routing systems for multi-model orchestration across different financial use cases
- Created comprehensive validation frameworks ensuring AI outputs meet regulatory compliance standards

ENTERPRISE INTEGRATION

- Obtained dual Fiserv contractor clearance enabling direct access to core banking systems for complex integrations

- Led cross-functional consulting with Fiserv teams, bridging business requirements with AI capabilities
- Established technical specifications and best practices for AI adoption in regulated financial environments
- Delivered production systems processing millions in daily transactions with AI-enhanced accuracy

Technologies: Python, TypeScript, MCP Protocol, PostgreSQL, Neo4j, ChromaDB, Qdrant, LLM Orchestration, Fiserv DNA

PayPal

Business Intelligence Analyst 3 | Systems Integration Developer

February 2023 - March 2024 (1 year 2 months)

Drove enterprise banking integration initiatives with focus on automated validation and intelligent process optimization.

INTEGRATION ARCHITECTURE
- Designed custom data transformation architecture for SAP Bank Analyzer, creating reusable patterns for complex financial processing and regulatory compliance
- Built cross-environment monitoring spanning QE/Dev/Prod with proactive alerting - providing real-time visibility across critical banking infrastructure
- Implemented transport rule configuration with automated testing, ensuring reliable business rule deployment across multiple environments
- Developed systematic validation frameworks with quality gates, reducing implementation errors by 35%

AUTOMATION & INTELLIGENCE
- Created decision tree framework for process automation using business logic modeling - improving accuracy by 25% across transaction scenarios
- Engineered automated validation systems with comprehensive error detection and intelligent reporting
- Built predictive monitoring capabilities identifying issues before production impact
- Established systematic verification procedures ensuring data integrity across integrated systems

TECHNICAL LEADERSHIP

- Led technical communication between business stakeholders and development teams, translating complex requirements into actionable specifications
- Drove adoption of automation best practices across integration teams
- Created reusable architectural patterns accelerating future integration projects
- Delivered technical documentation establishing standards for banking system integrations

Technologies: SAP Bank Analyzer, SQL, Python, Enterprise Monitoring Tools, API Integration, Business Rule Engines

Fiserv

Application Specialist II - Professional / SME | Systems Integration Developer

June 2019 - February 2023 (3 years 9 months)

Led core banking automation and integration initiatives as DNA CCM Module SME, driving technical transformation across financial institutions.

AUTOMATION & ARCHITECTURE
- Architected Python/SQL automation framework for core banking processes - reducing manual operations by 60% while maintaining SOC2 compliance
- Built production job scheduling system with dependency management and auto-recovery, achieving 99.5% reliability across multiple institutions
- Designed intelligent SQL query generation with parameter validation for real-time transaction monitoring across disparate platforms
- Created standardized APIs and data pipelines improving legacy-to-modern system interoperability

OPERATIONAL EXCELLENCE
- Implemented predictive diagnostic systems with automated root cause analysis - reducing resolution time by 40%
- Developed technical documentation system with automated validation, improving knowledge accuracy by 45%
- Established systematic troubleshooting workflows enabling proactive issue detection before customer impact
- Built comprehensive QA frameworks reducing onboarding time for new engineers by 50%

TECHNICAL LEADERSHIP

- Served as DNA CCM Module SME, providing expertise and training to 50+ engineers
- Led cross-system integration initiatives connecting core banking modules
- Maintained expert knowledge of financial regulations and compliance requirements
- Drove adoption of automation best practices across distributed technical teams

Technologies: Python, SQL, Fiserv DNA, Core Banking APIs, Job Scheduling, Process Automation, System Integration

Elior North America

Senior Technical Support Specialist (Lead Technical Analyst)
June 2016 - April 2019 (2 years 11 months)

Led enterprise infrastructure transformation and team of 15 engineers, driving automation across 200+ locations.

INFRASTRUCTURE ARCHITECTURE
- Architected enterprise hardware deployment solution with automated imaging/provisioning - reducing implementation time by 80% across 200+ locations
- Implemented VMware virtualization with automated backup/disaster recovery, improving reliability by 90% while reducing hardware footprint
- Designed infrastructure automation framework integrating CBORD, Zendesk, O365, and AD with standardized APIs
- Built role-based access management with granular security controls ensuring compliance across diverse environments

TECHNICAL LEADERSHIP
- Led 15-engineer team implementing standardized development methodologies - improving project delivery by 65%
- Orchestrated M&A technical integrations, merging infrastructures with zero business disruption
- Established coding standards, documentation protocols, and QA frameworks for enterprise governance
- Created comprehensive training programs enabling scalable team growth and knowledge transfer

OPERATIONAL IMPACT

- Eliminated manual configuration errors through systematic automation workflows
- Maintained security compliance across all 200+ locations during rapid expansion
- Reduced operational costs through virtualization and process optimization
- Built foundation for infrastructure scaling supporting corporate growth strategy

Technologies: VMware, Active Directory, CBORD, Zendesk, Office 365, PowerShell, Infrastructure Automation

BadgePass, Inc.

Senior Technical Support Engineer (Software Support Engineer)
April 2014 - May 2016 (2 years 2 months)

Engineered automated diagnostic systems and database optimization tools for Fortune 500 enterprise deployments.

AUTOMATION ENGINEERING
- Architected Python/SQL diagnostic framework reducing resolution time by 75% for 200+ enterprise users
- Developed database optimization toolkit ensuring 99.9% uptime for systems processing 50K+ daily transactions
- Built proactive monitoring with predictive maintenance, preventing 80% of failures before impact
- Created automated health monitoring and alerting systems using custom scripting solutions

INFRASTRUCTURE DEVELOPMENT
- Engineered VMware virtualized deployment architecture for technical environments
- Built standardized imaging solutions reducing deployment time by 60%
- Established testing/validation protocols with dev teams, reducing post-deployment issues by 40%
- Implemented comprehensive QA frameworks improving software release reliability

OPERATIONAL IMPACT
- Supported Fortune 500 access control installations with enterprise-grade reliability
- Created technical documentation with automated validation procedures

- Built knowledge management systems improving team efficiency
- Eliminated configuration inconsistencies through systematic automation

Technologies: Python, SQL, VMware, Access Control Systems, Performance Monitoring, Automated Testing I

The Computer Guys
Systems Administrator (Database Administrator)
June 2012 - April 2014 (1 year 11 months)

- Architected enterprise SQL Server environments with comprehensive disaster recovery capabilities and high availability clustering, ensuring 99.9% uptime for critical business operations while maintaining HIPAA compliance for healthcare facilities
- Developed custom database-driven applications for healthcare facilities using .NET framework and SQL Server integration, creating patient management systems with security compliance features and real-time data synchronization across multiple locations
- Implemented VMware server virtualization infrastructure with automated backup and recovery systems using PowerShell scripting, reducing hardware footprint by 60% while improving disaster recovery response times from hours to minutes
- Engineered standardized technical maintenance procedures and operational documentation systems, creating systematic workflows that increased operational efficiency by 50% through automation and reduced dependency on individual expertise
- Designed and deployed Cisco wireless network infrastructure with optimized configuration for seamless roaming across multiple healthcare locations, ensuring secure connectivity for medical devices and electronic health record systems
- Established comprehensive system monitoring and alerting frameworks using custom scripts and third-party tools, enabling proactive maintenance approaches that prevented 85% of potential system failures before impacting patient care operations

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Education

Computer Engineering