

BRYAN RUIZ

FOUNDER & LEAD ML / AI ENGINEER, SCARLET BEAST — DEEP RL · COMPUTER VISION · DISTRIBUTED TRAINING & MLOPS · SENIOR FULL-STACK

● OPEN TO WORK — ML / AI ENGINEERING, APPLIED RESEARCH, AND SENIOR FULL-STACK LEADERSHIP.
SCARLET@SCARLETBEAST.COM

🎯 OBJECTIVE

- To use technology to make a positive impact on humanity.

📁 EXPERIENCES

Aug
2017
|
Present

● **Founder & Lead ML / AI Engineer — Hiss (Poker AI) & GROWL (Algorithmic Trading)**

Scarlet Beast (scarletbeast.com)

📍 Remote

Founder and principal ML engineer of Scarlet Beast, building Hiss (a production poker AI) and GROWL (a crypto/forex exchange and algorithmic-trading platform) — owning the full ML lifecycle from distributed training infrastructure to real-time, latency-sensitive inference in money-moving environments. Work spans deep reinforcement learning, computer vision, time-series modeling, and the MLOps that ties them together across heterogeneous, cost-optimized compute.

Hiss — six generations of neural networks (M1 → M6):

- **M1 — Baseline:** first supervised model trained on hand-history corpora; established the feature schema (cards, position, stack depth, pot/bet ratios) and the evaluation harness (exploitability, win-rate in bb/100) used to grade every later generation. Built in PyTorch with NumPy / Pandas pipelines.
- **M2 — Self-play & regret minimization:** moved from supervised learning to self-play reinforcement learning with Counterfactual Regret Minimization (CFR / Deep CFR) and Monte Carlo rollouts, pushing play toward game-theory-optimal (GTO) strategies and lower exploitability.
- **M3 — Distributed scale-out:** re-architected training to run distributed across Oracle Cloud Infrastructure (OCI Ampere A1) and Kaggle GPU/TPU kernels, parallelizing self-play data generation across pools of low-cost processors; introduced distributed data parallelism, mixed-precision training, gradient accumulation, and a sharded self-play worker fleet.
- **M4 — Architecture & abstraction overhaul:** redesigned the network architecture and state/action abstraction (card embeddings, bet-size bucketing, deeper value networks) on top of M3's distributed data engine, with a heavier self-play schedule and a tightened train → evaluate → promote loop A/B-graded against the M-series baselines.
- **M5 — Generalization & robustness:** hardened the model across all eight game variants and tournament / casino formats, reducing overfitting to specific opponent pools and stack configurations and improving exploitability under off-distribution play.
- **M6 — Production inference:** optimized trained models for real-time serving on the hot decision path — ONNX export, quantization, and Visual C++ inference bindings with latency budgeting to deliver GTO-grade decisions inside live gameplay timing constraints.

Distributed training & MLOps:

- Built training on heterogeneous, cost-optimized compute: AWS SageMaker as the managed backbone for large training jobs, hyperparameter tuning, experiment orchestration, and model hosting / endpoints; Oracle Cloud (OCI Ampere A1) and Kaggle GPU/TPU kernels for high-volume self-play data generation on spot / free-tier capacity.
- Tooling: PyTorch, NumPy, Pandas, scikit-learn, CUDA / cuDNN, Docker, and MLflow / Weights & Biases for experiment tracking and reproducible, containerized pipelines.

Computer vision:

- OpenCV for image preprocessing, ROI / object detection, and table-state extraction, with Tesseract OCR reading cards, stacks, and bet amounts into structured features that feed directly into the Hiss inference pipeline.

GROWL — quant / algorithmic trading (fintech):

- Extended the same ML platform to live markets: time-series forecasting and signal generation over crypto / forex data (LSTM / Transformer and gradient-boosted models), a bot marketplace for algorithmic strategies, backtesting and walk-forward validation, and live order-book / market-data ingestion.
- Owned the surrounding fintech concerns — execution latency, risk controls, and a unified accounting layer ("The House Ledger") exposed via REST and GraphQL APIs.

Platform & infrastructure:

- Visual C++ high-performance inference engine, Python services, a React + Laravel application surface exposing public REST / GraphQL APIs, an SSO auth gateway unifying every product, and multi-tenant Linux / PHP-FPM hosting across the ecosystem.

Hiss source: <https://github.com/christianscarlet2/hiss>

● **Founder & Principal Engineer — Client Engineering Practice**

Scarlet Consulting Corporation

📍 Bronx, New York



CONTACT INFO

📍 New York City

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📞 732.619.3014

SKILLS

Adobe Commerce / Magento
Enterprise 1 & 2

Shopify / Shopify Plus

Symfony 6

React.js / MERN Stack

Angular / AngularJS

WordPress / WP Engine

CakePHP 1.x

Zend Framework / ZendAPI

Laravel / Django

Node.js / JavaScript ES6+

PHP 4/5/7/8.2 / PHP-FPM

HTML5 / CSS3 / CSS-in-JS

jQuery / jQueryUI / jQuery Address

Webpack / Babel / Yarn / Composer /

Grunt

GraphQL / REST APIs / JSON-RPC

MySQL / MariaDB / MySQL 5.7

Linux / Apache / Nginx / Cherokee

AWS EC2 / Lambda / SQS / S3 /

CloudFront

Serverless Framework

Platform.sh / Continuous Integration

Jenkins / Git / SVN / CVS

Docker / Containerization

SOLR / Elasticsearch / Lucene

Tealium / Tag Management

NewRelic / Zabbix / Performance

Monitoring

Google Analytics / PageSpeed Insights

Memcached / Redis / Caching

Strategies

Jan
2012
|

Present

Founder of Scarlet Consulting Corporation, an AI-empowered software consulting and digital infrastructure company focused on scalable web platforms, automation systems, performance engineering, and enterprise modernization.

Blending technical leadership with growth strategy and technical sales, I specialize in helping businesses transform operational bottlenecks into scalable systems using AI-assisted development workflows, modern cloud infrastructure, and full-stack engineering expertise.

With 15+ years of experience across enterprise and startup environments, I work directly with decision makers to architect and deliver high-performance solutions across eCommerce, SaaS, automation, and digital operations.

Core focus areas include:

- AI-assisted software development and automation
- Full-stack LAMP, Node.js, React.js, and cloud engineering
- Magento / Adobe Commerce and Shopify Plus ecosystems
- Technical sales, solution consulting, and client strategy
- Performance optimization and Core Web Vitals improvements
- AWS infrastructure, CI/CD pipelines, and DevOps workflows
- API integrations, Stripe payment systems, and scalable architecture
- Enterprise migrations and modernization initiatives

My approach combines rapid execution, automation-first thinking, and lean operational strategy to help companies move faster, reduce technical debt, and scale intelligently.

Now consolidated under Scarlet Beast, a conscious technology organization: applied AI and automation, performance engineering, platform modernization, and the ML systems the organization runs in production for itself.

Jan
2025
|
Dec
2025

● Fullstack PHP/JavaScript Developer, Plymouth Rock Assurance

Scarlet Consulting Corporation

📍 Woodbridge, New Jersey

- Made customizations to Angular application/widget to streamline app
- Identified and addressed issues is site performance related to Tealium Tags
- Addressed CORS issues with site on an enterprise level working with CloudFront team
- Investigated and addressed decrease in performance issues with public website
- Created and implemented a performance optimization framework for public website
- Framework was built in Node.JS and implemented in a serverless design using AWS Lambda Functions and AWS Simple Queue Service
- Obtained higher performance scores for Time to First Byte, Largest Contentful Paint, First Contentful Paint, Content Layout Shifts, And Speed Index
- "Serverless" Framework used to implement serverless functionality with performance optimizations.
- Increased Google PageSpeed Insights scores dramatically using performance optimization techniques
- Worked closely with Tealium to identify strategies to increase performance with impact caused by numerous Tealium Tags
- Worked with WPEngine Team to integrate performance optimizations, including tools like NewRelic

Jan
2024
|
Dec
2024

● Adobe Commerce / Shopify / Magento Enterprise Developer, DevaCurl

Scarlet Consulting Corporation

📍 New York City

- Assisted in parallel migration of Magento Enterprise to Magento 2 and Shopify Plus.
- Continuous Integration Pipeline was setup for Wordpress, React.js, and Magento assets using Platform.sh.
- Introduced and effectively worked with Data Wrangling Pipelines.
- Frontend Development, Backend Development of Custom Kits.
- Custom Kits allowed customer to choose a combination of products dynamically that were bundled for sale

Jan
2022
|
Dec
2023

● Adobe Commerce Lead Developer, Artspace

Scarlet Consulting Corporation

📍 New York City

- Custom architected front-end with Magento Backend for selling artwork pieces
- New reporting tab for tracking frames sold and financial data points
- Modified sales order tab to capture additional financial information
- Extended Magento base modules with Zend Framework custom SQL queries
- Migrated credit memos and invoices from older Magento install using custom scripts
- Bug fixing, front-end implementation, and plugin installation

Aug
2019
|
Jan
2022

● Magento Enterprise Lead Developer, Refinery29.com

Scarlet Consulting Corporation

📍 New York City

- Crafted custom voucher product type with event-based invoice creation and code delivery
- Extended Unigry's gift certificate module to streamline voucher functionality
- Created custom widget for displaying product listings by category
- Integrated Single Sign On between Refinery29 custom framework and Magento site
- Digested API to display Refinery29 articles on Magento platform
- Integrated GIT with Jenkins for one-click code deployments
- Produced RFP response, REST API documentation, and project scope of work

Aug
2018
|

● Magento Enterprise Developer, Redcats USA

Scarlet Consulting Corporation

📍 New York City

NFS / Network File Systems

AJAX / Asynchronous Programming

Payment Integration (Authorize.NET, Stripe)

WebAPI / ActiveResource / SOAP / XML-RPC

EAV Architecture / Database Design

Magento Indexes / Attributes / Modules

Module Development / Plugin

Architecture

Single Sign-On / SAML / openSSO /

CentralAuth

EDI (Electronic Data Interchange) / ASC X12

Data Pipelines / Data Wrangling

PHPUnit / Test Driven Development

XDebug / Debugging / Profiling

MVC Architecture / Design Patterns

Agile / Scrum / Kanban

Cloud Architecture / Serverless Design

Load Balancing / High Availability

Database Administration / MySQL

Optimization

Server Administration / System

Architecture

Security / HTTPS / SSL / CORS

Performance Optimization / Core Web Vitals

TTFB / LCP / CLS / Speed Index

Optimization

UI/UX Implementation / Wireframing / Prototyping

Flash / Uploadify / Rich Media

Technical Writing / Documentation

Project Management / Technical

Leadership

Client Communication / Stakeholder Management

RFP Development / Scope of Work / Proposals

Strong Interpersonal and

Communication Skills

Strong Understanding of Psychology

Self Motivated, Committed

Performance

Strong Self Learner

INFJ

Jul
2019

- Designed Magento Enterprise modules for product import and other functions
- Deep understanding of Magento internals: EAV system, cron scheduling, Adminhtml
- Implemented template pattern for import module with MVC integration
- Implemented Event/Observer hooks for product import automation
- Created production server setup documentation
- Setup .NET developers with Ubuntu virtual machines
- Trained Windows administrator on RedHat Enterprise Edition 5.6
- Integrated Apache, Cherokee, MySQL, Memcached, and NFS for database servers

Jan
2016
|
Jul
2018

● **Magento Enterprise Developer, Redbox / Cisco / Verizon**

Scarlet Consulting Corporation

📍 Montreal, Canada

- Mapped category and product data to SOLR for orchestration layer
- Refactored existing APIs to be stateless using Magento Controllers
- Created new APIs for SOLR integration
- Designed Magento Module for storing XML filter information
- Managed EAV attributes installation via Magento setup scripts
- Worked extensively with Magento Indexes and SOLR indexing

Aug
2015
|
Dec
2015

● **Magento Enterprise Developer, Toms Shoes & Eyewear**

Scarlet Consulting Corporation

📍 Holmdel, New Jersey

- Themed new Magento eyewear store
- Implemented shared session experience between two stores
- Profiled Magento core using XDebug to identify performance bottlenecks
- Completed AJAX store locator for multiple store support
- Implemented PHPUnit for unit testing modules and functions
- Researched SAML, openSSO, and CentralAuth security standards
- Load tested and profiled security solutions

Jan
2016
|
July
2018

● **Magento Enterprise Developer, Vizio**

Scarlet Consulting Corporation

📍 Holmdel, New Jersey

- Assisted with launch of newly developed Vizio.com
- Upgraded Vizio to Magento Enterprise 1.10
- Architected attribute system with PHPUnit unit tests
- Wrote APIs for Zend Framework to Magento integration
- Provided technical consultation to contracted development team

Jan
2013
|
Dec
2014

● **Magento Enterprise Developer, Publishers Clearing House**

Scarlet Consulting Corporation

📍 Jericho, New York

- Developed frontend and backend components on Magento Enterprise ecommerce platform
- Created Price Comparison Engine extension for uploading product feeds
- Uploaded product feeds to Google Product Service, Shopping.com, Shopzilla, and Pronto
- Developed and integrated responsive front-end design
- Configured load-balanced Redhat servers with MySQL

Aug
2012
|
Dec
2013

● **Backend CakePHP Developer, NBC Universal / Ivillage**

Scarlet Consulting Corporation

📍 New York City

- Integrated Recipe Swap feature for daily meal planning ("What's for Dinner?")
- Built CakePHP 1.1 site with Facebook XFBML invite feature
- Implemented Prototype drag and drop for Daily Meal Planner interface
- Integrated Uploadify Flash Uploader, jQuery Carousel, and Color Box
- Acted as Lead Developer and Technical Project Manager of small team

Oct
2008
|
Jul
2012

● **Zend Framework / CakePHP / Magento / LAMP Developer, Night Agency**

Full-time Position

📍 New York City

- Front & backend design & development on high traffic sites (Purex.com, PurexInsiders.com, SocialMixHub.com, MarkGirl.com, MJMinigolf.com, HanesPink.com)
- Created Hanes Dashboard using JSON-RPC server/client for 5 Hanes brand sites
- Built jQueryUI Slider, Dialog, DatePicker with jQuery Address for deep linking
- Developed CakePHP front-end with MySQL data store and automated nightly cron statistics collection
- Technical writing including proposals, specifications, timelines and documentation
- Implemented realtime server monitoring using Zabbix for 24/7 monitoring
- Managed partial server administration of 50+ servers across EC2, Slicehost, and Rackspace
- Grid-based, cross-browser compliant layouts with extensive jQuery and CakePHP development

Jan
2011
|
Jun
2012

● **Backend PHP Developer, Efashion Solutions LLC**

Full-time Position

📍 Secaucus, New Jersey

- Development, bug identification and bug fixes for 30 high traffic eCommerce sites including DKNY.com, store.Playboy.com, Rocawear.com, BabyPhat.com, and XOXO.com
- Designed and implemented development servers and development procedures. Includes SVN/CVS, SVN notifications by email, company email servers, MySQL server, test driven design, code documentation, file and code naming conventions, and daily reports

- MVC and Other Pattern Driven Development, PHP 4 & 5, MySQL 4 & 5, Adobe, Smarty, Zend Framework, Authorize .NET, SOAP, XML-RPC Bridges, Test Driven Development.
- Maintained and developed sites, created internal ERP applications
- Designed, implemented and migrated purchase order system for handling Electronic Data Interchange Asc X12 850, 997 and 856 via Inovis VAN for Liz Claiborne, New Era, Sean John, and other clients.
- Developed custom data import tools from numerous client relationships. - Developed tax reporting tools
- Managed Call center application that simplified placing orders for Call Center Personnel, upsell implementations.
- Was assigned feature requests and product improvements.
- Understanding gained of multiple vendor receiving systems



EDUCATION

2004
|
2007

Computer Science & Business Management

Rutgers University

📍 New Brunswick, New Jersey

Studied at Rutgers University, Double Major Computer Science and Business Management 3.15 GPA



PROFESSIONAL PROFILE & LEADERSHIP

EXECUTIVE SUMMARY

Bryan Ruiz operates as a systems-oriented technologist and execution-driven leader, combining deep full-stack engineering expertise with a strong bias toward measurable outcomes. With over 15 years of experience across enterprise and startup environments, he demonstrates a consistent ability to translate abstract business goals into scalable, high-performance technical solutions.

At his core, Bryan exhibits a builder's mindset—favoring rapid iteration, pragmatic architecture, and performance optimization over theoretical complexity. His leadership style is grounded in ownership and accountability, often taking responsibility not only for delivery, but for the long-term sustainability, scalability, and performance of systems under his care.

TEAM DYNAMICS & LEADERSHIP STYLE

Bryan leads through a combination of technical credibility and operational clarity. Rather than relying on hierarchy, he earns trust by actively contributing at the code level while simultaneously guiding architecture, workflows, and team direction.

- **Hands-on leadership:** Actively codes alongside teams, setting standards through example
- **Cross-functional translator:** Bridges gaps between engineering, product, and business stakeholders
- **Process optimizer:** Establishes repeatable systems (CI/CD, documentation, performance benchmarks) that elevate team output
- **Offshore and distributed team experience:** Successfully coordinates global teams with clear communication and delivery expectations

His leadership approach emphasizes clarity over control, enabling teams to move fast without sacrificing quality. He is particularly effective in environments that require stabilization, modernization, or scaling under pressure.

VISION & STRATEGIC THINKING

Bryan demonstrates strong visionary thinking grounded in technical feasibility—an uncommon balance between ideation and execution. He is able to identify leverage points within systems, whether in performance optimization, platform migration, or API-driven architectures, and align them with broader business objectives.

His work reflects a pattern of:

- Anticipating scaling challenges before they become bottlenecks
- Designing systems that reduce operational overhead through automation
- Aligning technical decisions with measurable KPIs (Core Web Vitals, conversion performance, system throughput)

This results in a leadership profile that is not purely visionary, but vision backed by delivery.

COGNITIVE & PROBLEM-SOLVING PROFILE

Bryan's thinking style is highly analytical, pattern-driven, and systems-focused. He approaches problems by decomposing them into their underlying structures, allowing him to identify root causes rather than symptoms.

Key cognitive traits include:

- **Systems thinking:** Sees infrastructure, code, and business logic as interconnected layers
- **Performance-first mindset:** Prioritizes efficiency (TTFB, LCP, CLS, API latency) as a core engineering concern
- **Adaptability:** Comfortable working across multiple stacks (LAMP, MERN, serverless architectures)
- **API-centric thinking:** Strong ability to design and integrate complex third-party systems (e.g., payment platforms, data pipelines)

*This resume was wholly typeset with HTML/CSS see
git.io/vVSYL*

He thrives in technically ambiguous environments where solutions are not predefined and require independent problem-solving and architectural judgment.

EXECUTION & WORK ETHIC

Bryan's professional identity is anchored in execution and delivery. He consistently demonstrates the ability to:

- Take ownership of projects from concept to deployment
- Deliver under tight timelines without compromising system integrity
- Balance speed with long-term maintainability

His work reflects a strong internal standard for performance, reliability, and completeness, often going beyond requirements to ensure systems are production-ready and scalable.

SUMMARY POSITIONING

Bryan Ruiz is best characterized as a:

- Senior Full-Stack Engineer with Technical Leadership Capabilities
- Execution-Focused Systems Builder
- Performance-Driven Architect
- Pragmatic Visionary Bridging Business and Engineering

He brings a rare combination of deep technical skill, leadership through contribution, and strategic awareness, making him highly effective in roles that demand both hands-on development and high-level ownership of outcomes.