Jeannie Duarte

ASSESSMENT PLATFORM & DATA ARCHITECT

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Fluent in the science, author of the engineering.

Data and scoring architect for one lineage of validated selection-assessment instruments, carried across **four platform generations** — OCR capture of hand-marked forms, SQL Server, MongoDB, Azure — from 1998 to now. Designs scoring, normative, and reporting architecture as **a peer to psychometricians**, and holds design authority over the platform's user surfaces, where **the interaction patterns are bounded by what the instrument measures**. Specifies whole systems precisely enough for an offshore vendor or an AI coding agent to implement correctly at a distance, then runs the delivery function that carries them **from specification to release sign-off**. Co-founder of a licensed child-placing agency, where the same discipline runs a compliance platform that state credentialing reviewers have examined and approved.

ONE ASSESSMENT PLATFORM, FOUR GENERATIONS

1998 – 2000	**Batrus Hollweg International — BH2000, via Campanella, Inc. —** Researched, designed, and implemented OCR capture of hand-marked answer forms to replace the prior system; primary business analyst, database architect, and DBA (SQL Server).
2002 – 2012	**Batrus Hollweg / 3Peaks — BH Select, via BrainStorm SDG (own firm) —** Built the entire SQL Server data and scoring layer (stored-procedure processing) for a high-volume assessment platform serving hundreds of client organizations.
2013 – 2015	**Knox Technology — SonicAssess —** Specified the data architecture from inception for the MongoDB-generation platform that absorbed the Hollweg instruments and assessment services.
2014 – present	**Hollweg Assessment Partners — HAPselect —** Architect of the Azure-generation system, application behavior and data architecture alike. Implemented by a contracted development vendor to written specification.

EXPERIENCE

Hollweg Assessment Partners — HAPselect

2014 – present

HEAD OF TECHNOLOGY (SENIOR TECHNICAL CONSULTANT)

GENERATION 4 OF 4

Employee since 2021, and consultant and subject-matter expert from 2014. The company's only technical staff member and, since 2023, **the sole remaining**

holder of the platform's technical history. Owns system architecture, data architecture, technical specification, and roadmap for a candidate and employee assessment platform.

SCORING, NORMING, AND REPORTING

The platform's scoring layer carries **two paradigms**, both designed and specified here with the company's psychometricians: first, ratings applied at the score level, with the founding psychologist; then the conversion of all scoring and calibration to percentile ratings, with the R&D lead. The Overall and Potential algorithms are of this design, as is the logic for reading percentiles against rating ranges — and **an original multi-pass percentile rescoring method** in which composite percentiles are re-normed against the benchmark.

Rating adjustment is data-driven and composable: progressive triggers keyed to percentile ranges, with compounding parameters that adjust dependent ratings and emit outputs for recruiting decisions. **Configured, deterministic, auditable.** The bridge from the psychometric team's statistical analysis platform into production was built here as well — the Excel-structured export format, the import requirements, and the database import routine.

The reporting layer is **composable and client-configurable**. Elements are mixed and matched by trait type and rendering model, then stacked sequentially: custom trait labels, custom items such as problem-solving scenarios, custom components, and custom reports. Narrative comes from a prioritized-trait comment mechanism, where priority traits are measured against a candidate's scores and database-configured comments are returned in priority order. It has been **in production for more than ten years**.

INTERFACE AND EXPERIENCE DESIGN

Design authority for every user surface — candidate, client, and administrative — across the legacy platform and the redevelopment alike. The fully documented instance is the redevelopment's candidate experience, researched and written here: a designer's primer on selection regulation and applicant-reactions theory, a surface-by-surface design direction across eight surfaces, and working HTML mockups, to WCAG 2.2 AA, with client co-branding carried as a constrained theming layer rather than per-client forks. What makes any of it assessment design rather than web design is that **several interaction patterns are locked by measurement validity** — the forced-choice direction flip, the timer on a speeded cognitive instrument, the four-point Likert with no midpoint — so the design moves only where moving it cannot change what the instrument measures.

THE DELIVERY FUNCTION

Sole responsibility for the delivery function since 2022. An offshore development team implements to written specification; an infrastructure vendor operates Azure. Everything from the specification through the release sits here.

Scope, specification, and design come first, then handoff with expectations set at handoff. Priority and sequence for the team's work follow, and the project board with them — **every JIRA ticket, feature and bug alike, personally written**. Stand-ups have run twice weekly since the launch into Azure, often three or four times weekly, and carried the migration from score-based to percentile-based ratings. Follow-up runs through implementation, pre-release QA, and release sign-off; testing of features, fixes, and releases sits here as well.

Vendor staff rotate off the project as they move to other roles, so documentation and ticket discipline are what carry continuity across the handovers. **Technical authority over what ships sits here too**: the company's owner carries domain authority and is not technical, and the platform's original builders are gone. That concentration of knowledge was named as the first risk in the modernization proposal written for the owner.

Data-preservation and retention analysis through product decommission is led here, and this is the named technical contact for clients' integration shutdown and data-export requests.

PLATFORM, CLIENTS, AND INTERNAL SYSTEMS

Chief API architect for client integrations — project-driven integrations with Workday, iCIMS, and other ATS/HRIS platforms; a bridge integration for a client HRIS that offered no integration surface; and the design and specification of the general API that clients consume.

When the company's I/O staff were gone, client analytics came here directly: score data extracted and shaped for Tableau and AI consumption, analytical workbooks built, and richly formatted data interpretation delivered to clients in person. **Data interpretation, not psychometric analysis** — the instrument stays with the psychologists.

The platform-modernization decision was **designed for a non-technical owner**. The vendor's single estimate came bracketed with conservative and aggressive alternatives and a plain-language decision framework; scope was held at the application layer, MongoDB retained. Azure infrastructure was specified as a complete resource bill of materials, and migration **sequenced by blast radius** — candidates, then clients, then administrators — with staged cutover and rollback. Score-correctness acceptance testing was routed to psychometricians rather than developers, so the people who know whether a score is correct maintain those test cases.

hapbi, the company's internal analytics and operations site, was **built solo, human-directed and AI-assisted from concept to implementation**. It generates and exports billing, manages pricing with change history, reports on

clients and activity, and carries a candidate right-to-be-forgotten module with dry-run preview, audit trail, and response letter. Node/Express on Azure, Entra ID authentication, SQL Server and MongoDB Atlas, CI/CD with staging-slot swaps.

An **AI-assisted consultant-summary system** was carried to proof of concept in 2023–24, and never formalized or adopted. Prompts assembled the client's job description, the platform report, the client's stated preferences, and the candidate's score data into a draft consultant summary, and every draft was reviewed by the owner before release. It was used on real candidates to cover a consultant absence, and most drafts were released without change. It was later extended to executive assessments with the owner's own rules and writing samples.

Refuge House, Inc. & Refuge House San Antonio, Inc.

2002 – present

CO-FOUNDER · DIRECTOR OF OPERATIONAL DEVELOPMENT

Co-founded two state-licensed Texas child-placing agencies and established both corporate entities, with technology, operations, quality, security, and board roles since. **Radius**, the agencies' case-management and document platform, was architected and hand-built here in VB.NET and SQL Server and has been **in continuous production since about 2004**; its front end is now migrating to **Pulse** on Node/Express and Azure. A layered compliance platform sits alongside it — an artifact catalog, a data-source registry, a playbook registry, and a git-versioned policy knowledge base — **implemented by directing AI coding agents against written specifications and acceptance checklists**, under a standing rule that nothing AI-generated becomes operative without a named human approving it. State credentialing reviewers have examined and approved the documentation — the one engagement where specification, implementation, and regulatory examination all sit with one person.

Knox Technology, Inc.

2013 – 2015

SENIOR SOFTWARE ARCHITECT & DBA · CLIENT SUCCESS LEADER

GENERATION 3 OF 4

Data architect from inception for SonicAssess, with specification and database architecture across relational and NoSQL stores, and ETL delivering decrypted historical data to clients. Also sprint planning and scrum master for the delivery team through its migration from Assembla to Atlassian, and client success lead for a candidate assessment product, with direct client and user support.

Duarte + Duarte LLC, dba Moxie Graphic Productions

2014 – present

CO-OWNER · OPERATIONS PRINCIPAL

Co-owns a graphic design, print production and vinyl installation firm, running operations, finance, multi-state tax filings, pricing structure, contracts, and systems; earlier, creative direction and graphic design for print, signage, and digital. Built the operations app and a daily digest automation, and designed a **local-first message-classification architecture** that keeps personal traffic off cloud models by classifying before the sender is identified.

Grant Thornton LLP

2012 – 2013

SENIOR ASSOCIATE — SOFTWARE ENGINEER, TECHNOLOGY AUDITOR · 2006

Two stints, the second after a decade of independent consulting. Managed multiple internal-audit and consulting engagements across industries, built a security review tool for Oracle Financials, and **managed a development team** for an audit-management tool.

BrainStorm SDG, Inc.

2002 – 2012

OWNER & PRINCIPAL CONSULTANT

GENERATION 2 OF 4

Own consulting firm, working with teams of developers executing detailed project plans. Built **the SQL Server data and scoring layer** for **BH Select**, the Batrus Hollweg / 3Peaks assessment platform, with Great Plains/Dynamics billing integration. Other engagements ran in oil and gas, physical-therapy practice management, and BI; **Radius**, the child-placing agencies' case-management platform, was built through this firm.

Campanella, Inc.

1998 – 2000

INFORMATION SYSTEMS CONSULTANT

GENERATION 1 OF 4

For Batrus Hollweg International: **BH2000** — **the OCR capture system and SQL Server data architecture** described above, as primary business analyst and DBA.

Earlier DAVACO / estorefixture.com — Information Systems Engineer and DBA, 2000–2002 · AMRESCO, Inc. — Senior Business Analyst/Programmer, PeopleSoft HRMS implementation, 1996–1998 · FoxMeyer/McKesson — Database Coordinator, 1996 · New Horizons — Applications Instructor, 1995–1996

SKILLS

DOMAIN	Selection-assessment scoring, normative, and reporting architecture; assessment interface design bounded by measurement validity, to WCAG 2.2 AA; ATS/HRIS integration; UGESP data and reporting; AI on regulated data (redaction upstream of inference, human approval gates); Texas DFPS and T3C
DATA	SQL Server (design, T-SQL, stored procedures, migrations), MongoDB and Atlas; ETL and BI with HEVO, Tableau, Power BI, SSRS
PLATFORM	Azure App Service and Azure SQL, Entra ID and MSAL, Key Vault, GitHub Actions with staging-slot swaps, Vercel, Docker
APPLICATION	Node/Express, VB.NET, React and TypeScript, Next.js; token, magic-link, and OIDC authorization patterns; API design; MCP server design; JIRA administration, Airtable
AI-DIRECTED DEVELOPMENT	Claude Code, Cursor, Claude Cowork, Claude Design, under a written tool-routing and human-review policy; specification-first, acceptance-checklist delivery

EDUCATION

Dallas Baptist University, BAS in Computer Information Systems and Business Administration, 1998–2001 · Brookhaven College, Nonprofit Management Certificate, 2004

COMPLETENESS

This document is assessment and data architecture. For the rest — what I have done, what I know, and where I shine — visit jeannie.goduarte.com.