

Michael K. Janda

Senior Full-Stack Software Engineer · Virginia Beach, VA

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SUMMARY

Founder and software engineer with 12 years owning a three-tier Java/Spring research platform — message-driven deploy and administration, Hibernate/JPA with 100+ XSD types, custom OAuth 2.0, AES-GCM at rest, and XSLT pipelines that emit HTML/JS tests and 150-sheet Excel workbooks. Complement: a C# desktop client (WinForms → WPF/.NET 10) used at Oxford and Princeton.

EXPERIENCE

IAT Software — Founder & Software Engineer Virginia Beach, VA · 2014 – Present

Founded and operate a research platform that lets non-technical professionals create, deploy, and analyze Implicit Association Tests based on Harvard methodology. Own architecture, implementation, operations, documentation, and support. Adopted by researchers at Oxford and Princeton.

Server — IAT Server (Java, Spring, JPA/Hibernate, XSLT)

- Three-tier, message-driven Spring application for deploy, administration, and encrypted results.
- 100+ XSD types; XJC + Hibernate/JPA with polymorphic persistence. Custom OAuth 2.0 provider (one-time auth codes, 20-minute access tokens, 14-day refresh).
- XSLT pipelines: configuration XML → HTML/JS test administration; result streams → Excel workbooks of 150+ worksheets.
- AES-GCM plus asymmetric encryption at rest so a stolen database is unreadable. Linux administration, nginx, KnockoutJS site load 8s → 2.5s.

Desktop client — IAT Design (C#, WPF, .NET 10, MVVM)

- Point-and-click IAT designer: blocks, trials, text and image stimuli, instruction screens, surveys. 600+ class WinForms original, now a layered MVVM rewrite.
- Domain objects hold data and Guids; file, network, and UI effects live in injected services. Persistent WebSocket client with UTF-8 text frames and backoff.
- Reduced peak memory from ~1 GB to 55 MB via bitmap caching.

SKILLS

Languages	C# · Java · JavaScript · SQL · XSLT · C++ · Assembler
Desktop / .NET	WPF · WinForms · MVVM · CommunityToolkit.Mvvm · .NET 10 · DI · MediatR · FluentValidation · OPC Packaging
Backend	Spring · JPA / Hibernate · Message-Driven Beans · WebSockets · XSD / XJC · MySQL · Linux administration
Web	KnockoutJS · React · SCSS · HTML/JS via XSLT
Systems	Multithreading · AES / RSA · Memory optimization · Polymorphism · Meta-programming

EDUCATION

Old Dominion University — B.S. Computer Science, 2020 · Norfolk, VA