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| **Timothy A. McKnight**  20739 S. Newberry Ave, Frankfort, IL 60423  tamcknight@gmail.com | (708) 261-4920 | **Energetic technology leader focused on solutions that deliver continuous value to the client** |

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| **Highlights**   * **Versatile technologist** offering 16+ years of technology experience in the finance sector focusing on asset management and hedge funds * **Strategic Thinker** with a track record of generating new ideas and approaching problems differently * **Subject Matter Expert** **in** **Asset Management** processes includingtrade processing, settlement, data management, trading environments and front office systems * **Wide Range skills** including team management, production support, QA, development in a variety of languages and code metrics * **Skilled in all phases of the SDLC** including expertise in translating business requirements into technical solutions, testing strategies and release management * **Strong** **knowledge** across equities, fixed income, derivatives, futures, credit default swaps and other asset classes * **Hands on Management Style** that values strong teams and leads by example * **Platform Agnostic Developer** with experiencein a variety of languages * **Enterprise Application Integration** with vended and home-grown applications across Windows and Linux environments * **Experienced solution architect** capable of interpreting the enterprise architecture and bringing them to life   **Core Skills**   |  |  | | --- | --- | | **Core Languages:** | Java, Perl, Python, Shell Scripting, SQL, C# | | **Development Tools:** | IntelliJ, Pycharm, Jira, Visual Studio, VS Code, Rally, Confluence, Fisheye, GitHub, Subversion, Gradle, Maven, YourKit, DotTrace | | **Frameworks** | Various Apache open source projects including Camel, Zookeeper and Tomcat, Spring Boot and Spring ecosystem, Jersey, Jackson | | **Architecture:** | Enterprise Integration Patterns, Microservice Architectures, Messaging Architectures, End to End solution architecture, TOGAF ADM | | **SDLC:** | Agile, Waterfall, Kanban, Scrum | | **Data:** | Mastering and governance principles, quality practices, ETL frameworks (Pentaho), JSON, XML, FIX, SOAP, Swagger | | **Operating Systems:** | Unix, Linux, Windows, Solaris | | **Databases:** | Sybase, MSSql, Oracle, Redis | | **Continuous Delivery:** | Team City, Nexus, Sonar, Semmle, Docker | | **Soft Skills:** | Developing architecture standards, leading large working groups, IT risk management, presenting to various audiences and stakeholders, MS Office Suite | |  | **Education**  Northern Illinois University – 2001  B.S. in Operations Management and Information Systems with MIS Emphasis  Economics Minor  **Activities**  Mentor for American Corporate Partners Veterans Program  Boy Scout Merit Badge Counselor and Asst. Scout Master  Triathlon  Cycling  Astronomy  Coaching Youth Sports  **Current Learning**  Hyperledger DLT  Microservice Architectures  Code Quality Metrics  AWS/Azure  Python  Mongo DB |

**Professional Experience**

**Head of Development – Director | UBS Asset Management - (February 2018 – Present)**

Manage development team of 10 for the UBS O’Connor hedge fund covering all back, middle and front office applications. The fund trades the following asset classes including equities, fixed income, derivatives, futures, CDS, commodities, and swaps.

* Accountable for delivery 40+ applications utilized by front office, middle office, compliance and risk across Windows and Linux environments. Security Master, Live PnL, PnL attribution, web reporting, tick engine, trade processing environment, data distribution, and Merger Arb tooling are all in house developed. Key vended applications include:

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| Eze Castle (OMS) | Front Arena (Cross Asset Risk) | Syncova (Margin mgmt) | FlexTrade (EMS) |
| Geneva (Accounting) | Open Staars (Reconciliation) | Monis (Conv Bond Valuation) | APT (Beta mgmt) |

* Perform all hiring, budgeting, resourcing and software contract maintenance functions for the team
* Provide technical oversight across all applications, review designs and mentor developers
* Work with key business stakeholders to prioritize development items and maintain release roadmap
* Migrated team to agile project management practices and coached the team on their new way of working
* Contribute code when possible
* Enhanced credit tooling by stabilizing current tools and created new capabilities via third party platform

**Solution Architect – Director | UBS Asset Management - (November 2017 – Present)**

Focused on architecture, software design and integration of front office technology including order management, execution, risk, portfolio construction and optimization across the division.

* Executed an architecture and code review of C# fixed income platform that was having stability problems in 6 weeks. Recommendations included refactoring of message handlers, indexing database tables, changing cache locking method, improve load balancer, introducing the ability to capture metrics to measure operability
* Assessed integration patterns of Longview OMS with other applications and worked with teams to simplify and decouple by using a RESTful style of communication
* Perform technology and architecture risk assessments for new technology initiatives including a technical review of in-house Portfolio Optimization platform
* Point person for production incident root cause analysis
* Oversee all front office application integration divisional security master plant replacement
* Chair bi-weekly technical discussions with 50+ developers driving new technology initiatives
* Contribute code to various projects when teams need additional capacity
* Partner with business stakeholders on long term strategy initiatives and technical feasibility

**Technical Architect – Director | UBS AG - (Jan 2016 – November 2017)**

Worked on several UBS wide initiatives impacting software delivery including standardizing SDLC, formal solution architecture practices, managing software technical domains, evangelizing innovative technologies

* Managed the resolution of a number of key group wide operational risk deficiencies across IT, Risk, HR and the lines of business
* Built communities of technical leads focused on standardization of engineering methods and tooling
* Solution Architect for regulatory program focusing on process unification for EMIR and MiFid II
* Created 2 of top 5 ideas in Asset Management firm wide innovation competition (both being pursued)
* Drove technology and architectural patterns used in Asset Management data re platforming project
* Performed deep dives on large projects and applications
* Oversaw solution designs for capabilities that cover Asset Management and Wealth Management
* Lead large, crosscutting initiatives across delivery such as peer review tool selection, build chain tool standardization, and solution architecture best practices
* Designed and executed a thematic review of all major build pipelines in UBS to highlights risks
* Created a code quality standard that entailed code quality metrics, peer review practices and tooling
* Participated in technology evaluations including evaluations of Docker, Cloudfoundry and internal Iaas
* Serve as domain architect for 40+ technical domains

**Developer Pool Manager – Director | UBS Asset Management - (Jan 2015 to Dec 2015)**

Managed 35 developers across North America for Asset Management covering fixed income, single manager hedge fund, and investment solutions businesses while running a devops team managing deployment and infra.

* Managed developers across a variety of disciplines including Java, C#, Perl, Python, and Level 3 support
* Project Manager for bank wide initiative to standardize on a single deployment tool
* Continued developing on projects for the O’Connor business
* Served a Subject Matter Expert for data integration across the Asset Management division
* Responsible for coaching and mentoring team members, helping with training and career development, performance management and driving an overall culture of improvement
* Management duties included performance reviews, hiring, project resource management, approvals, and employee training and education
* Worked with peer pool managers to create consistent processes within the asset management pool

**Software Engineer Lead – Director | UBS O’Connor - (Jan 2007 to Dec 2014)**

Software engineer working on projects that ranged from custom development to vended system integrations. Primary coding languages were Java, Python, and Perl with small amounts of C++.

* Architected and developed a Java RESTful data service that scaled to serve the entire enterprise estate
* Solution architect and developer lead for EZE Castle OMS implementation. Developed all integration code and restful trade processing services in Java. Wrote allocation RFP for vendors.
* Integration team lead for Front Arena risk platform replacement Project. Python was the core language.
* Solution architect and developer on several projects including front office, risk, and middle office systems. Examples include the Geneva accounting system integration, Open STaars reconciliation system and trade affirmation systems
* Performed the Devops role for the development staff where responsibilities included maintaining Jira, Team City, Confluence and Subversion repository setup
* Created CRUD front end applications using Java Swing, SWT, and Java. The majority of the applications were for maintaining data in the data masters.
* Responsible for security master ingestion process maintenance and enhancements
* Created web applications for the front office that presented PnL, risk and exposure data to front office users. Java was the core language using the Tapestry framework
* Part of a team of 2 responsible for architecting, developing, testing and supporting a proprietary OMS written in Java. JMS was utilized for messaging along with the Inforeach Fix engine.
* Responsible for firm portfolio rebalancing process and Java based real-time tick service
* Developed in Java the integration layer that decoupled producer and consumer systems for trades. Apache Camel was used extensively
* Served as business analyst for middle office requests
* Developed and maintained security and reference data masters using SQL and Perl

**Support Analyst – Associate Director | UBS O’Connor - (Jan 2004 to Dec 2006)**

Production support lead for all applications in the O’Connor estate and became QA engineer for all applications in middle and back office.

**Data Analyst/Operator | UBS O’Connor - (March 2002 to Dec 2003)**

Ran batch jobs, monitored production, and provided L1 support while maintaining reference and security data in all systems.