

# Kevin T. Manley

---

CONTACT INFORMATION	20 Clayton Place Ridgefield, CT 06877 mobile: +1 203 501 5006	kevin.manley@gmail.com linkedin.com/in/kevinmanley github.com/kmanley
PROFILE	Hands-on software architect/tech lead with a creative, practical approach. Specific experience applying distributed/grid computing to Finance. Excellent communicator; can face off to front office and senior MDs. Effective at mentoring and leading other developers.	
EDUCATION	<b>University of Washington</b> , Seattle, Washington, USA. <b>2001–2002</b> <i>MS Computer Science (Honors)</i> <b>Worcester Polytechnic Institute</b> , Worcester, Massachusetts, USA. <b>1984–1988</b> <i>BS Electrical Engineering (High Distinction)</i> . 4 Year US Air Force Scholarship.	
SELECTED PUBLICATIONS AND AWARDS	2005 SQL Server Innovator of the Year Award, awarded by SQL Server Magazine, Jan 2006 “In Theatres Now: How Python Runs the Largest Independent Cinema Group in the UK” Presentation to EuroPython 2005 Conference, Gothenburg, Sweden, Jun 2005 Wrote several articles in C/C++ Users Journal, Dr. Dobbs’s Journal, Windows::Developer Magazine, JavaPro magazine, and IBM developerWorks website between 1998–2002 (details on request)	
PROFESSIONAL EXPERIENCE	<b>Bank of America Merrill Lynch</b> , New York, New York, USA <i>Director</i> <b>Jun 2012 – Dec 2015</b> Responsible for mortgage front office realtime trading/marketing applications dealing with hundreds of thousands of positions. Led full lifecycle effort to replace vendor apps with new Quartz-based apps. Rolled the solution out successfully to multiple trading desks with no downtime. Mentor and manage a global team of developers. Team SME for Python-related technologies. Technical liaison between mortgage and Core teams. Face off to mortgage senior traders and Core senior MDs. Hands-on, leads the team in commits and reviews.  <b>Bridgewater Associates</b> , Westport, Connecticut, USA <i>Software Architect</i> <b>Aug 2010 – Jun 2012</b> Established architectural principles and introduced modern technologies into an aging software stack. Redesigned backoffice systems around custom grid computing and process management resulting in faster and more robust EOD batch processing. Convinced senior management to transition the backoffice from .NET to Python, significantly boosting developer productivity. Trained and mentored developers. Presented Tech Talks to CTO and wider developer community. Hands-on; delivered multiple pricing and risk solutions to the business.  <b>Independent Consultant</b> , London, United Kingdom <b>Jul 2006 – Aug 2010</b> Consulted for a number of banks and hedge funds in London. Details of contract engagements below.  <i>Standard Bank</i> Sep 2009 – Aug 2010 Brought back to build the “next generation” risk engine for the firm’s USD \$2.5bn credit trading operation. Designed a custom grid computing and process management framework available for general use, and implemented the risk engine on the framework. The result has 75% less code, is more reliable, easier to monitor, and runs 5x faster which enables running intraday risk.  <i>Capula Global LLC</i> Feb 2009 – Sep 2009 Built the software infrastructure running the middle/back office for this USD \$3.5bn fixed income hedge fund. Wrote a custom grid computing platform and deployed it to 70 desktop machines, leveraging unused computing capacity. Designed and implemented a comprehensive business process management framework. Modified the fund’s EOD batch to run on this infrastructure; the result was 4x faster and could be resumed from any point of failure.	

*Conduit Capital Markets* Oct 2008 – Feb 2009  
Architect and lead developer of a computing grid and Monte Carlo pricing framework for exotic derivatives. Used SWIG/C++ to expose Quantlib stochastic vol models to Python. Wrote a high-performance custom desktop grid computing infrastructure. Deployed and maintained a production grid of 30 machines. Built a distributed Monte Carlo pricing framework allowing complex path-dependent derivative payoffs to be expressed in Python. Integrated with Sungard Front Arena.

*Standard Bank* Mar 2008 – Oct 2008  
Lead developer and Python SME for credit risk engine team. Trained and mentored developers. Profiled, identified and fixed performance problems. Sped up inbound data load from Asset Control by a factor of 8x. Refactored stress VaR engine increasing performance by a factor of 4x. Implemented several FSA requirements for CAD II including security model and audit checks.

*Peloton Partners LLC* Jun 2007 – Mar 2008  
Senior software developer for this USD \$3bn global macro hedge fund. Responsible for infrastructure code to support the trading operation, risk management, and back office. Identified a bottleneck in EOD processing and built a custom grid solution to fix it, allowing parallel processing of reporting jobs. Sped up daily P&L reporting time 14x from 7 hours to 30 minutes. Built a comprehensive framework for managing outbound data feeds to counterparties.

*Citi* Feb 2007 – Jun 2007  
Senior developer on Citi's proprietary FX option trading platform. Integrated stochastic volatility models and implemented distributed pricing on the firm's Platform Symphony grid. Created a cost-based trade distribution framework in the grid client layer which cut the time to run risk by 25%.

*Barclays Capital* Jul 2006 – Feb 2007  
Key developer on the banks Core Risk Engine. Migrated code from proprietary grid to Data Synapse. Created a C extension module which allowed developing CRE client applications in Python.

**Arts Alliance Media Ltd., London, United Kingdom**

*Architect & Lead Software Developer* Oct 2002 – Jun 2006  
Designed and built Newman Online ([newmanonline.org.uk](http://newmanonline.org.uk)), one of the most advanced software packages for managing multi-site cinema groups, currently running operations for 150 screens across Europe. Gathered requirements, performed business analysis, and wrote technical specs. Designed a flexible, scalable, multi-tier SOA. Interviewed, hired, and managed the development team. Instituted agile development methods. Led the coding effort. Integrated hardware (touch screens, serial displays, ticket printers, ATMs, chip & pin). Oversaw nationwide rollout in UK, assisted in training and led ongoing maintenance. Presented demos and status updates to senior managers up to board level. Performed the technical due diligence that led to the purchase of DVDOnTap, which was re-branded LOVEFiLM and grown to be Europe's leading online DVD rental service, later acquired by Amazon.

**Software Developer,** Sep 1992 – Oct 2002  
Worked in a variety of contract/perm C/C++ roles, building everything from mobile games to medical imaging software to Internet ad servers. Because these roles are far in the past, and to keep this resume concise, details available on request.

**US Air Force, Davis-Monthan Air Force Base, Tucson, Arizona, USA**

*Officer* Sep 1988 – Sep 1992  
Transformed the Bioenvironmental Engineering field by creating a software suite to automate all manual processes. Rolled out the software and trained engineers worldwide. Commanded a team during Operation Desert Storm; built a field hospital, created a regional water testing lab, and managed chemical attack preparedness while deployed at Al Minhad Air base, United Arab Emirates.

PROGRAMMING Python, Go (golang), C, C++, Javascript, SQL, NoSQL (Redis, Cassandra), multi-threading/multi-processing, async/event-driven programming, distributed/grid computing, SOA, OOP, XML technologies, Web technologies, TCP/IP, requirements gathering, large scale software design, test-driven development, Agile methodologies, version control (git, svn).

REFERENCES Available on request