

Timothy Michael Varley

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OBJECTIVE A senior technical position where my excellent problem solving and development skills can be utilized in a challenging environment. Working with a team of highly motivated and high calibre individuals.

CAREER ACHIEVEMENTS I led the team that developed a high performance and highly scalable web based portfolio management system. I designed and implemented the task distribution infrastructure that facilitates efficient message passage between many machines within a processing grid. The processing grid scales up and out effortlessly, the system self tunes the balancing algorithm based on recently observed thruput data. Machines are added to the grid, they self bind and the grid tunes itself based on the new processing resource availability data.

I designed and implemented portfolio construction algorithms in C++ and Matlab. Algorithms that had to be maintained and enhanced in Matlab and C++ in parallel. The algorithms used advanced risk modeling and portfolio optimization theory to suggest optimum trades, considering various investment goals and numerous constraints.

I lead a team of AIT employees during that companies first US based project. The continued success of that project ultimately led to the formation of AIT (USA) Inc, a subsidiary of AIT Plc. I defined and implemented the technical strategy for US operations and worked closely with the group's CTO to define the global technical strategy.

I was responsible for the design and development of some of the pivotal components within the AIT product architecture (multi platform component library, Multi thread library, Website content management system, Browser based CTI, XML message transport).

I have initiated and led several research projects in business and technical areas that were ultimately beneficial for AIT and its clients. This included a plan to lead AIT into investment banking projects by partnership. AIT now only operates in partnership in investment banking.

I was asked by Microsoft directly to advise them and help define their strategy in Financial services. I was a contributing member of the DNA/FS Advisory Council and the DNA/FS Schema Working Group.

Inventor of the multiple channel banking solution (US Pat 6,119,104). This concept and design won a Smithsonian award for Innovation in Financial Services (nominated by Bill Gates). The design is now in the permanent archives of the Smithsonian innovations library.

As Senior Systems Designer/Programming Specialist at Dun and Bradstreet Europe, I led multiple teams through the design and development of an revolutionary office solution installed in 13 countries.

I am currently pursuing a CFA charter. I am a Level 1 Candidate.

SKILLS *Programming Languages:* C++, C, VisualBasic, Matlab, SQL, XML, XSL, XSD, Perl, PHP, HTML, DHTML, Javascript, VBScript, PowerShell, Unix Script (born, korn, ksh etc.), Assembler.

Industry: CFA Member (Level 1 Candidate)

Technologies: Standard C++ Library, Generic programming, Internet Technologies (HTTP, FTP etc), Microsoft technologies (MFC, .NET, ATL, COM, GDI, MSMQ etc.), Apache, SQLServer, MySQL, sed, awk, yacc.

Operating Systems: Windows, OS X, Linux, Unix

Tools: L^AT_EX, Microsoft Office, Rational Suite, Visio, Microsoft development suite, gcc, csv, Subversion, Tortoise, gnuplot, GIMP, Photoshop,

Others: Detailed and thorough designs for large and small systems, Creation and promotion of best in class development practices, Architecture design and implementation of enterprise systems, Multi faceted development skills, Requirements creation and analysis, Strategic technical planning, Workflow and business modeling, Product creation, Optimization, Product Enhancement, Technical writing, Creative problem solving, Technical Team Leadership/Mentoring, Project Management, Pre-Sales and Marketing Support,

Experience

Upstream Technologies
Cleveland, OH and Boston, MA

VP of Engineering, Research and Investment Group
2002-Present

I implemented the production version of Upstream's portfolio construction algorithms. I led the research team, leading us through the transition from an academic prototype to a production implementation. I also helped the quantitative researchers refine the algorithms (originally implemented in Matlab) by applying engineering techniques to their environment and mentoring the development. I designed and implemented an processing architecture that allows Upstream's system to be highly scalable. The successful implementation of these components are responsible for making Upstream the market leader in SMA portfolio management.

I created and helped Upstream adopt development standards and techniques that accelerate the products performance, shorten the time to develop enhancements and raise quality. I trained staff and showed the benefits of an Agile development methodology.

AIT US Inc
Cleveland, OH

Lead Technical Architect
1995-2002

As Technical Architect for AIT US based operations, I defined the technical strategy and played a central role implementing that strategy. I was involved in various capacities in every project that AIT (USA) developed.

AIT PLC
Henley-on-Thames, UK

Principal Systems Engineer
1993-1995

As Principal Systems Engineer, I helped AIT adopt and implement object orientated development technologies. I developed coding standards, build procedures and held design reviews for many projects. I designed several of AIT's products and consulted on many others. The products for which I held the lead architect role were: A highly configurable (and award winning) retail banking platform, a distributed stock dealing system, an desk (on the floor) trading system, a resilient equity pricing system and a scalable trade order processing system.

Dun and Bradstreet
High Wycombe, UK

Senior Systems Designer
1989-1993

As Senior Systems Designer/Programming Specialist, I designed and implemented a distributed N-Tier system used in all of the European offices. This involved the creation of communication architecture that enabled the distribution of applications and technologies but still allowed localized maintenance and customization.

GPT Datasystems
Maidenhead, UK

Systems Engineer
1987-1989

As systems engineer, I designed and developed various embedded protocol converters and access points for the travel and telecommunications industries.

EDUCATION

Brookes University, Oxford, UK
HNC in Computer Science, June 1987

Oxpens College, Oxford, UK
OND in Computer Science, June 1984