

BILL MEACHAM, Ph.D.

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SUMMARY OF QUALIFICATIONS

- **Independent Scholar in Philosophy.** Author of *How To Be An Excellent Human* and *How to Exert Free Will*, both available on his website, <https://bmeacham.com>. Author of numerous essays on philosophical topics as applied to everyday life on his blog "Philosophy for Real Life," <https://bmeacham.com/blog/>. He brings the precision required for good software development to the analysis of philosophical concepts and to the deep questions posed by philosophy: What's real? How do we know what's real? And what shall we do about what's real?
- **Requirements Analyst:** Interfaces with IT and end users to develop requirements for mission-critical software systems.
- **Project Manager:** Former Project Management Professional (PMP), certified by the Project Management Institute (PMI). Carefully discovers and documents functional and technical requirements, then estimates accurately the effort, cost and duration needed to implement the project. Consistently brings projects in on time, within budget and with required functionality.
- **Process and Quality Improvement Trainer and Auditor:** Develops curriculum, delivers training, documents and improves processes. Teaches the SEI Software CMM.
- **Information Systems Architect:** Extensive experience designing relational databases, Internet systems, user interfaces, web sites and client-server systems.
- Extensive experience in manufacturing, banking, public safety and government
- Software testing and quality assurance

EXPERIENCE

Independent Scholar in Philosophy, 4/94 – present

Author of *How to Be An Excellent Human* (2013) and *How to Exert Free Will* (2015)

Requirements Analyst, Dell, Inc., 4/05 – 4/14

Analyze business needs and develop software requirements for mission-critical software systems. Responsible for projects lasting several years and costing up to ten million dollars. Interface between end users and software developers.

Independent Consultant, Austin Texas, 1/02 – 3/05

Provide managerial and technical advice, perform software quality assurance, design and build web sites for various clients.

Project Management and Business Process Improvement

Worked with project managers and engineers to create a standard schedule template for new product development at a major computer manufacturer. Customized Microsoft Project Server 2003 to support the effort. This initiative will reduce project ramp-up time, streamline status reporting, provide unified executive reports and reduce process inefficiencies. The client expects cost reductions of over \$1 million annually. Was given an award for "exceptional contribution" to the project.

Project Manager

Planned and tracked the production of a major research report for a not-for-profit affiliation of University of Texas and private-sector personnel promoting clean energy as a viable economic activity in the Central Texas area. The report won consistent praise from entrepreneurs, policy-makers and educators, resulting in increased funding and expanded outreach activities for the affiliation.

Quality Assurance Analyst

Verified compliance of software development processes to published standards and provided guidance in process improvement to a large state agency. Trained and coached project managers, software designers and programmers in effective software development techniques. Instigated and oversaw publication of standards documents that had been stalled in bureaucracy for over two years. Created, implemented and conducted a post-project lessons-learned review process for project managers, findings from which decreased cost over-runs by 25%.

Conducted independent verification and validation (IV & V) of a mission-critical mainframe computer system for another state agency. Extensive data analysis using Business Objects.

Consultant, Renaissance Worldwide (formerly Sterling Information Group), Austin, Texas, 8/91 - 12/01

Project Manager, Software Designer and Developer

As project manager, directed a team of six developers to create a web-based Virtual Event application. (A "virtual event" is an on-line analog to a real-world event such as a conference or trade show.) The application enables users to create and attend virtual events over the Internet. The application was built with Microsoft technologies including Site Server, IIS, SQL Server, ASP and COM+. As project manager, oversaw the entire project and tracked it to successful completion. Estimated effort, defined software requirements, scheduled work, assessed risk, tracked ongoing progress, tracked expenditures against the budget, applied contingency plans to mitigate risk, and resolved technical and personnel conflicts, working very closely with the client's program manager. The project was completed on time and on budget, and the client was very pleased with both the result and the manner in which it was accomplished.

Acted as project manager, database designer, Oracle database programmer and Tango web site programmer to create an e-commerce (Business to Consumer) web site. This site aggregated inventory and sold items from a great many resale, thrift and antique stores on the web. Managed the database and web application group, and coordinated the efforts of that group with graphics designers, telecommunication programmers and desktop application programmers in four separate cities. The project plan was based on functional requirements and effort estimates which I gathered in a prior engagement with the same client, and which resulted in my company's being retained to develop the product. As part of this effort I designed and built the database, specified the interfaces between the various components, and wrote the system test plan. As a result of the site's going up on time and with full functionality, the principals were able to secure round-two funding.

Acted in a dual capacity as project manager and Oracle database designer and programmer to create a secure e-commerce web site for the client's customers done in WebObjects. The project plan was based on functional requirements and effort estimates which I gathered in a prior engagement with the same client. That engagement resulted in my company's being retained to develop the product. My team of five programmers and web site designers completed the project ahead of schedule, and our client was extremely pleased with both the quality of the delivered product and the professionalism with which we executed the project.

Provided Information Technology expertise in a number of consulting engagements, including the following:

- Documented the IT infrastructure of a major Austin computer manufacturer in order to facilitate the rollout of a new consumer product. Identified several bottlenecks and inefficiencies among the components of the client's legacy systems and Web storefront and made recommendations for improvement. A key benefit was to provide an overview of the interactions among various systems, which had been hidden from those in charge of each individual system. This engagement was in conjunction with the Renaissance Business Solutions Group.
- Assessed the IT infrastructure and the IT Department management practices of a Colorado school district. Identified best practices and made recommendations for improvement in a report to the district school board. This engagement was in conjunction with the Gibson Consulting Group.

In several small engagements, gathered functional requirements, analyzed and developed software requirements and derived estimates of the effort required to implement and deliver the product. In one case the client decided to pursue an option that would require less effort and retained my company in a different capacity. In another, the client praised the professionalism of my report and retained my company to develop the product.

Designed, developed and managed a mission-critical client/server database application to track discrepant material non-conformances for a leading supplier to the semiconductor industry using Delphi for the user interface and Oracle for the database. This application won consistent praise from users and was selected for implementation worldwide in all the client's manufacturing sites. Planned and managed the development, installation and integration with the client's business process.

Designed a Microsoft Access-based Pending and Closed Sales Tracking database and reporting system for a large computer manufacturer.

Acted as project leader for the development of an Informix-based product definition database and specification management system for a major semiconductor manufacturer. Designed and coded the application in Informix 4GL.

Analyzed, designed, coded, tested and installed enhancements to a large-scale manufacturing support system utilizing an SQL database and client/server architecture on a multi-user Tandem mainframe. This system was awarded the client's Quality Award and was instrumental in the client winning the Greater Austin Quality Award for Highest Achievement.

Process Improvement Change Manager

Oversaw and implemented cultural change strategies for a highly-successful software consulting company and for that company's clients. As chair of the Software Engineering Process Group, was instrumental in bringing software developers from SEI Level 1 to Level 2 in only ten months. Consulting company's reputation for employing excellent software development process and producing excellent results caused its annual revenues to grow 700 percent in three years and to be acquired by a national leader in software consulting services.

Software Quality Assurance Auditor

Monitored software developers' adoption of and adherence to a defined development process. Acted as coach and trainer in process improvement based on the Software Engineering Institute's Software Capability Maturity Model.

Trainer and Curriculum Developer

Developed and presented a two-hour mini-workshop on *Estimating Software Projects* for the Austin Chapter of the Project Management Institute. The text is available at <http://www.bmeacham.com>.

Co-developed and co-taught a 30-hour course for Sterling employees and clients titled *Software Engineering Methodology*. This covers all phases of a software project, including project management, feasibility analysis, requirements gathering, requirements analysis, design, implementation and post-implementation review.

Developed and published a 34-page *Software Development Process Guide* for use internally by Sterling Information Group.

Developed a 16-hour course on *Evolutionary Rapid Prototyping* as a software development life cycle.

Developed and delivered an 8-hour course, *Introduction to Process Improvement Based on the Capability Maturity Model*.

Taught numerous courses on improving software quality to clients' employees in Austin, Fort Worth and Seguin, Texas, and Schaumburg, Illinois. Examples of these courses include *Developing Quality Software*, a two-day survey of software development methodology, and *Introduction to SEI CMM*, a three-day, in-depth introduction to the Software Engineering Institute's Capability Maturity Model.

Systems Analyst, Sheshunoff Information Systems, Austin, Texas, 7/83 - 8/91

Designed microcomputer software for banking applications, including Call Report Preparation, Safe Deposit Operations, Financial Planning & Budgeting, Financial Statement Analysis and others. Had extensive involvement with users, translating user desires into structured systems specifications. Translated Federal banking regulations into rules-based software systems.

Wrote extensive technical and user documentation including user manuals for ten software products.

Programmer/Analyst, Austin National Bank (now Chase Bank), Austin, Texas, 4/81 - 6/83

Designed and coded mainframe banking applications, including Installment Loan, Commercial Loan and Certificate of Deposit systems. Oversaw implementation of systems, wrote technical documentation. Was trained in structured design techniques.

EDUCATION and PROFESSIONAL TRAINING

- Rational Unified Process and Object-Oriented Analysis and Design – official Rational on-line training materials, self-study.
- Project Management Professional Preparation, Austin Project Management Institute
- Hatley-Hruschka-Pirbhai methodology – *Process for System Architecture and Requirements Engineering*, self-study
- Software Estimating for Small Projects, Software Quality Institute, University of Texas at Austin
- Software Scheduling and Cycle Time Management, Software Quality Institute, University of Texas at Austin
- XML Boot Camp, XML Solutions
- Introductory and Intermediate Tango Development, official Pervasive Software training

- Programming WebObjects I, official Apple training program
- Software CMM Instructor Training, Software Engineering Institute
- Software Engineering, Sterling Information Group internal consultant training
- Ph.D., Philosophy, University of Texas, Austin, Texas
- MA, Philosophy of Religion, Columbia University, New York
- BA, Philosophy, Williams College, Massachusetts

TECHNICAL QUALIFICATIONS

Arena	Skill Set
Project Management	Former Project Management Professional (PMP), certified by the Project Management Institute (PMI).
Software Development Methodology	Hatley-Hruschka-Pirbhai methodology: <i>Process for System Architecture and Requirements Engineering</i> (New York: Dorset House, 2000). This methodology uses Data Flow Diagrams, Control Flow Diagrams, Object-Relationship Diagrams and Information Architecture diagrams to define software (technical) requirements, all of which are rigorously traceable to functional requirements.
	Rational Unified Process, industry-standard development process for object-oriented systems.
Tools	<ul style="list-style-type: none"> ▪ Microsoft Project ▪ Project Server 2003 ▪ ERwin ▪ BPwin ▪ Oracle SQL-Plus ▪ UNIX system utilities ▪ Microsoft Office ▪ Visio ▪ Business Objects ▪ Photoshop
Database Management Systems	<ul style="list-style-type: none"> ▪ Oracle ▪ SQL Server ▪ Microsoft Access ▪ MySQL ▪ Borland Database Engine ▪ Informix ▪ Tandem SQL
Programming Languages	<ul style="list-style-type: none"> ▪ PL-SQL ▪ HTML ▪ JavaScript ▪ PHP ▪ Tango ▪ Delphi ▪ COBOL ▪ PASCAL ▪ MS/DOS Batch
Operating Systems	<ul style="list-style-type: none"> ▪ UNIX (Solaris 7) ▪ Windows 95, 98, NT, 2000, XP, 7, 8 10 ▪ Macintosh ▪ MS/DOS ▪ Linux
Hardware	<ul style="list-style-type: none"> ▪ Sun ▪ HP ▪ IBM PC ▪ Macintosh

COMMUNITY SERVICE

- Webmaster and Secretary-Treasurer, Inayati Order of Austin
- Trustee, Church of the Golden Rule
- Former chairman and treasurer, East-West Center of Austin
- Computer and software troubleshooter, numerous nonprofit organizations