Kathryn R. Reading

katereading@radiantgeek.com, 571-335-0356
1390 Hayes St #3, San Francisco, CA 94117

Education

Georgia Institute of Technology, Atlanta, GA   Master of Science in Computer Science, Degree in Progress
Duke University, Durham, NC   Bachelor of Science, Computer Science; Math, French and Linguistics minors

Professional Employment History

Lead Software Engineer | CIA, Washington, DC | March 2015 - Present

- Responsible for strategic direction, software architecture and quality for a team of engineers developing secure communications software and firmware.
- Building an integrated team that relies on solid configuration management and DevOps practices.
- Introducing the software and management teams to Agile methods through implementation of Agile ceremonies, artifacts and planning.
- Technical projects include UX design for C# WPF Hardware Settings Application, and Firmware Unit Testing.

Senior Software Engineer | CIA, Washington, DC | August 2012 – March 2015

- Responsible for quality in engineering and strategic vision. Guided technical leads in agile design and development of secure communications systems and fostered continuous improvement. Led strategic planning efforts, aligning solutions with needs. Mentored officers across the directorate.
- Represented the Office of Technical Service on the Directorate of Science & Technology Women's Council.

Projects

Modular System Configuration Application - Technical Lead
- Designed the application in C# with WPF with Entity Framework and SQL. Prioritized user stories, led system design and implementation. Ensured quality with usability testing, unit and integration testing. The product has impact across the Center affecting every customer facing deployment.

Configuration Application Development Kit - Technical Lead
- Designed and built developer tools for configuration including XAML templates, shared libraries, Visual Studio Templates and documentation. Lead a scrum for configuration developers across the center.

Field Software Engineer| CIA | August 2009 – August 2012

- Provided world-wide, cross-mission engineering support. Led products from analysis through design, development, testing, deployment, training, and maintenance. Built field expedient solutions when necessary.
- Leveraged partnerships with engineers across directorate bringing together operational needs and technical experts. Mentored technically minded people in the creation of custom and modified software.
- Led a region wide Android development conference with operations officers.

Projects

Remote Data Collection Application - Technical Lead
- Web front end with php back end. Linux based data collection and service. The successfully deployed product facilitated secure, responsive remote configuration and data management by non-technical users on unstable local infrastructure.

Remote Command and Control - Technical Lead
- Developed an Android based remote command and control data collection system.

Quick Reaction Capabilities - Technical Lead
- Provided rapid engineering support for high priority technical operations adding features, fixing bugs and identifying workarounds. Packaged solutions for reuse and communicated requirements to the engineering teams, relieving pressure on engineering group and closing need gaps.

Lead Software Architect | CIA, Washington, DC | November 2006 – August 2009

- Provided technical direction on all projects and chaired the Engineering Advisory Team in a branch of dozens of engineers. Defined strategic vision, aligned needs to project proposals, and steered branch culture evangelizing architecture, standards, agile principles and code reuse.
- Gathered user needs and defined requirements for a new business area. Led complete development cycle working across the engineering group to ensure successful end-to-end system functionality.
- Mentored junior engineers, helping grow their technical and professional skills.

Projects

Secure Symbian Product Line - Technical Lead
- Technical Lead for several Symbian-based projects including adding internationalization support to an existing system, and developing the UI, architecture, and configuration for a new system.
- Provided technical direction for two externally contracted Symbian applications.

Senior Software Developer | CIA, Washington, DC | July 2004 - November 2006

- Defined the branch's technical agenda and spearheaded efforts to improve the internal development environment and processes as a member of the Technical Advisory Board.
- Led configuration development for the branch. Served as a technical consultant to external branches.
- Advised junior developers and technical leads in design, development, and leadership of software projects.

Projects

Windows Mobile PPC & Smartphone Secure Communications Applications - Technical Lead
- Oversaw design, engineering, requirements, and risk management for first projects of their kind.
- Windows Mobile 5.0 with C# for platform specific UI. C++ for cross-platform data protection and system security. Windows MFC C++ for configuration/deployment. XML for configuration files.

User and Data Management Product - Technical Architect
- Designed service pack update system written in C++ and C#. Proved concept by writing first implementation.

Data Transfer Interface - Technical Architect
- Designed and implemented interface between data input and data transport. Decoupled development across teams and improved communication within the system, improving data integrity and user experience.

Applications Developer | CIA, Washington, DC | August 2002 – July 2004

- Developed secure communications software in C++ and C# for Windows (XP, Pocket PC, Smartphone) and in Java for the Symbian platform. Used XML for data storage and runtime settings. Optimized existing C++ code through componentization. Centralized complicated logic improving quality, maintainability, and design across product lines.
- Analyzed feedback on existing configuration process, designed and implemented a unified configuration tool as a plugin framework in C++ with MFC. Improved configuration efficiency and customer satisfaction.
- Developed a configuration plug-in kit including automation tools, code templates, detailed documentation, and shared libraries to lessen software configuration burdens on other developers.
- Served as a founding member of the branch Technical Advisory Board, providing technical perspective on management issues and feedback on project designs.

Technical Skills

Languages: C# (WPF), C++, Java
Targeted Platforms: Windows, Linux, Android, Symbian
Tools: Cruise Control, git, svn, Visual Studio, Eclipse, Target Process, IntelliJ
Development Process: Agile, Scrum, Kanban, Unit Testing, Certified SAFe Practitioner
Dabbled in: Ruby on Rails, Python, HTML/CSS, Javascript, php, perl, SQL, Full Stack/Front End/Back End