

ERIC L MONTELLESE

Sr. Software Engineer

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Work Experience

My experience is defined by the ability to quickly develop new skills and deep understanding for each system, an independent motivation and competence in determining solutions to complex problems, and a history of leaving each system cleaner than it started.

In addition to technical skills, I thrive as an architect and team leader, and take pride in communicating effectively with my team, and with customers; whether through presentations, effective technical documentation, or discussion.

Owner —*EME, Inc.*, Hockessin, Delaware

2007 - Present

Collaborated with customers, often geographically diverse, to develop a variety of successful products
Acumen leading teams, working as a member of a team, or working independently

Experience with the full product life-cycle, bringing projects from idea, to design, to mass-production

Maintainable architectures ensure long product lifecycles and reusable modules, maximizing IP value

Sample of Recent Customers and Projects:

- **ARM TrustZone -- Qualcomm -- STMicroelectronics -- Kaleidescape**
Architecture and implementation of AACS (Blu-ray's AES-based encryption mechanism) in a development kit and as a Trusted Application for ARM TrustZone, allowing secure content decryption
- **Intel -- Samsung -- Broadcom -- LG -- Sony -- Hitachi -- Freebox -- Google**
Blu-ray/DVD software turn-key solutions for high-profile customers and products
Development from basic concept to on-shelf product
Specialized in data stream processing and security/decryption, as well as SoC integration
- **Maculogix**
User interface and encryption security for medical diagnostic equipment
- **Intel -- Comcast**
GStreamer open source driver development for streaming video
- **Otis Elevator**
Computer Vision-based Virtual Elevator Control Panel Prototype in Microsoft Visual Studio
- **Broadcom -- Philips**
Smart TV software interface
- **Databrary / Datavyu**
Contracted to kick-start the open-source psychology data-coding and sharing library, "Databrary"
Incubated early stages of the project, helping to organize a team and the development, QA, integration, and release process
- **Pike Creek Physical Therapy -- Virginia Journal of International Law
Renaissance School -- Groundwork Farms**
Website development solutions

Software Engineer — *Videon Central, Inc.*, State College, Pennsylvania

2004 - 2007

- Integral member of original six-person team responsible for design and implementation of *first-generation* Blu-ray application software
- This product ultimately won C-NET's Best of CES Award at the 2007 Consumer Electronics Show
- Millions of devices continue running this software today
- Excelled in an environment of creativity, independent motivation, and pride in work

Research Programmer — *Applied Research Lab*, State College, Pennsylvania

2003 - 2004

- Worked independently from concept to product
- Designed and implemented a tool for data acquisition, storage, computation, and analysis
- Generated extensive documentation, allowing this software to continue viability for >10 years

Research Programmer — *Pennsylvania State Child Development Center, Infant Cognition Lab*

University Park, Pennsylvania

2001 - 2003

- Streamlined data entry and processing for research projects
- Successful data analysis led to co-authorship of two research papers in Psychology

Education

Bachelors of Science, Computer Engineering

August 2004

The Pennsylvania State University, Schreyer Honors College

State College, Pennsylvania

with High Distinction and with Honors in Mechanical Engineering

Selected to represent College of Engineering as Commencement Student Marshal

1st place: Senior robot design competition, award and scholarship

Skills

Expertise

Embedded Linux, Blu-ray, DVD, Encryption, AAC3, ARM TrustZone, DVD-CSS, Cinavia, Computer Vision

*nix Development

Bash Script, GDB, GNU Make, CMake, SSH, vi, Sed, Awk, Busybox, Wireshark, Gtk, Gdk

Collaboration

Git, SVN, Jira, Agile, Scrum, GitHub, CVS, Bugzilla, Code Collaborator, Continuous Integration

Software Languages

C, C++, Visual C#, Python, Java, Visual Basic, Matlab

Windows Development

Visual Studio, .NET, MS Interop., N.I. CVI, MS Visio, Netbeans

Web

HTML5, CSS3, PHP, MySQL, Django, JavaScript, Apache, .htaccess

Other

Father - Mountain Climber - Whitewater Kayaker - Foodie - Mountain Biker - Student Pilot - Guitar Player