Matthew Lazarowitz

Personal Information

🌐 linkedin.com/in/Matthew-Lazarowitz

Work Experience

Sr Software Engineer
NVIDIA
📅 07/2017 – present 📍 SANTA CLARA, USA

- Spearheaded the development of a prototype system for evaluating code coverage within camera system firmware
- Formulated coding guidelines for C and C++ languages in alignment with MISRA and AutoSAR regulations
- Augmented Camera SW FMEA procedures
- Collaborated with the PVA team to integrate their FMEA process
- Designed and implemented tools for analyzing C++ feature utilization
- Provided insights on C++ feature usage to facilitate decision-making between MISRA C++ and AutoSAR
- Established a framework for physical safety of active sensors on the DRIVE IX platform
- Integrated industry-standard practices into the formal code inspection processes of the Camera Team
- Developed a metrics-driven approach for planning and executing code inspections
- Designed and implemented necessary tools for implementing the metrics-based code inspection strategy.

Technical Lead
Cisco Systems
📅 06/2012 – 05/2017 📍 SAN JOSE, USA

- Spearheaded the design and implementation of the Precision Boot Order feature for Cisco blade servers
- Successfully created and submitted patent applications for the Precision Boot Order feature
- Enhanced logging support to streamline identification of root causes for unexpected boot behavior
- Developed UEFI shell utilities to assist engineers in troubleshooting BDS issues
- Prototyped an XML parser to optimize the interface between UCSM and server firmware
- Conducted research on unit testing challenges in UEFI and implemented a hybrid unit testing environment prior to the availability of Microsoft's framework
- Ensured timely shipment of new hardware by resolving compatibility issues and establishing firmware standards.

Senior Software Engineer
Booz Allen Hamilton
📅 10/2010 – 05/2012 📍 MCLEAN, USA

- Developed and enhanced mobile data recovery tooling for Booz Allen Hamilton's DOJ client
- Executed feature phone vulnerability analysis to identify and mitigate potential security risks
- Conducted in-depth analysis of feature phone flash images to facilitate data recovery efforts.

Software Engineer
American Megatrends
📅 09/2005 – 09/2010 📍 NORCROSS, USA

- Supported firmware development for new hardware platforms
- Implemented custom firmware requests on existing platforms
- Migrated features between code bases
- Conducted root cause analysis for software failures

Education

Electrical Engineering | Bachelors
Penn State University
📅 12/2004 📍 USA

Publications

Edge Anti-Aliasing Utilizing Morphological...
Proc. of the International Conference on Consumer Electronics
📅 01/2005
0-7803-8838-0
This paper explores using a combination of image dilation, thresholding, image subtraction, and some novel kernels to identify pixels that meet certain criteria as an 'edge' pixel. These pixels could then selectively be blended to soften the appearance of those edges.

Patents

US8869282 Anti-malware support for firmware
US9401848 Stateless flexible boot control

Please visit my LinkedIn profile and personal GitHub page to learn more about my personal engineering projects.