

Alex E. Miller

Summary

My greatest talent is being able to quickly understand and integrate new concepts, which happens to coincide with one of my life passions – learning something new every day. Throughout my formal education, professional career, and myriad hobbies, I have sought broad-ranging topics from engineering, medicine, and machine learning to music, philosophy, and woodworking. I do not profess expertise in any singular field, but I expect myself to be proficient and apply a high quality of effort to any domain I happen to work within. In many of my former pursuits, I started with a peripheral knowledge and taught myself the rest of what I needed to accomplish it.

Relevant Work Experience

Implementation Consultant – Synchrono

July 2014 – Present

- Dedicated primary representative for a large client, while also providing assistance with specific projects for other clients.
- Responsible for consulting, development, customization, and maintenance of the full suite of Synchrono products installed across several COEs within the client's division.
- Responsible for all Synchrono-related servers, databases, and integrations. Performing DBA functions including managing backups/restores, permissions, monitoring/troubleshooting, and performance optimization. Performing development functions including design and implementation of new features and integrations to other business systems and shop floor machines, using SSIS, C#/.NET, SQL, Modbus, OPC, and RPC.
- Significant projects include:
 - Design and development of an OEE system for factory floor machines that extended existing data collection implementations.
 - Design and development of an LED board display system for floor operators, which synthesized data in real-time from multiple sources, based on RFID scans of tools and materials throughout the factory.

Process Integration Engineer – Transform Solar

November 2010 – July 2012

- Provided cross-functional support of development and manufacturing of unique SLIVER solar cell technology. Managed projects spanning cell fabrication, subassembly production, and analysis of laminated module performance and reliability.
- Managed Development phase of two improved cell technology nodes from Proof-of-Concept phase; both passed review and were released to Manufacturing phase within 5 months.
- Responsible for creation and analysis of Design of Experiments (DOE) to investigate and improve product performance and reliability by altering emitter diffusion and anti-reflective coating processes, with results meeting and exceeding project goals.
- Interface directly with SQL database and automated manufacturing tools to gather data. Implemented JMP, SQL, Python, and Cognex In-Sight programming to aid in automation of statistical data analysis.
- Manually gathered data at the cell, subassembly, and module level for R&D and QA purposes. Measurements taken include cell quantum efficiency, flash test metrics, and thermal infrared and visual microscope images.

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Education

B.S. Materials Science and Engineering – Boise State University

August 2005 – August 2010

- Physics minor
- Mechanical Engineering emphasis
- Worked as a Research Assistant in the C-MEMS Laboratory (2006-2010)
- Senior project working with Sandia National Laboratories (2008-2009)
- ASME Mechanical Engineering Club Member (2005-2010) and Chair (2008-2009)
- Materials Science Club member (2005-2010)

Highlighted Skills

Personal Skills

- Experience with managing and actively participating in technically-diverse team projects.
- Enthusiastic about self-directed training based on various objective needs.
- Comfortable conveying technical information in presentations and documents, intended for both trained and laypersons.
- Calm and deliberate demeanor under stress, and natural rapport with others.

Technical Skills

- Computer programming familiarity, including C#/.NET, SQL, R, Python, and Java.
- Familiar with Windows and Linux operating systems and command line.
- Proficient with office productivity and collaboration software, including JIRA/Confluence and Git/SVN.