

Sarah Irene Brown
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Education:

Northern Arizona University Flagstaff, AZ

- Bachelor of Science Mathematics with minor in Physics Aug 1996- Aug 2000

GPA: 3.86

Awards: Graduated with Magna Cum Laude honors. Recipient of the NASA Space grant for undergraduate research in physics, the NAA academic award, and the Anna Catherine Ryan Scholarship for exceptional performance in physics and mathematics. Member of the Golden Key National Honor Society and National Dean's list.

- Master of Science Mathematics Aug 2007-present (graduation in May 2009)

Current Cumulative GPA: 3.75

Transcripts available upon request

Experience:

Micron Technology Inc. Boise, ID Aug 2000- Dec 2006

Job title: Process Engineer

Description: Micron designs and manufactures semi-conductor memory products. I spent 4 years as a yield enhancement engineer. My primary function was to review yield for various product lines and solve yield problems using a variety of physical failure analysis techniques and statistical/analytical methods to determine where improvements were needed in the manufacturing process. This required hands on electrical failure characterization and chemical deprocessing using a variety of lab equipment. In addition, I worked with other process engineers to develop experiments to reduce defects and enhance the process flow. I also spent 2 years working inside a class 10 cleanroom environment dealing directly with the manufacturing process. My primary function was to use statistical process control methods to monitor the process flow and identify any out of control areas and then develop and implement process changes. I was also responsible for identifying through-put constraints and developing methods to reduce product cycle time. I worked with process R&D departments to design experiments and develop new or improved process flows. I also performed occasional preventative maintenance of fabrication equipment. I was the lead yield enhancement engineer in charge of bringing the newest DRAM memory architecture from its development phase into full production.

Northern Arizona University Flagstaff, AZ Aug 2007-present

Job Title: Graduate Teaching Assistant

Description: As part of my graduate assistantship I have taught 2 courses per semester including courses covering college algebra, financial mathematics, statistics, probability and graph theory/management science. This involves complete preparation for the courses including lecture material, exams, quizzes, homework assignments and holding regular office hours to accommodate students needing additional help.

Courses Taught:

- MAT 108—Algebra for Pre-calculus—Fall 2007
Algebraic operations; simplifying expressions; functions; graphs; linear expressions, absolute value, quadratic, cubic and square root functions; solving equations and inequalities; systems of equations
- MAT 114—Quantitative Reasoning—Spring 2008 and Fall 2008
Contemporary quantitative methods, especially descriptive statistics, elementary probability, examples of statistical inference, linear and exponential models of growth and decay, and applicable discrete models
- MAT 119—Finite Mathematics—Spring 2009
Concepts, techniques and applications of systems of linear equations, geometric linear programming, mathematics of finance, combinatorics and probability

Other Skills and Experience:

- SPC(statistical process control) methods and principles
- extensive hands on laboratory and failure analysis experience
- data extraction and data analysis techniques
- knowledge of experiment design methods
- experience interfacing with engineering groups of a variety of disciplines
- abundant experience working in a cleanroom environment
- proficient in the use of a variety of software packages including Word, Excel, Powerpoint, JMP, Documentum and many other industry specific software platforms including database query and data extraction packages
- knowledge of through-put and manufacturing cycle time concepts
- familiarity with quality and reliability principles and methods
- experience directing and training other engineers, technicians and production operators
- experience in the use of a variety of microscopic imaging equipment including SEM, FIB, Dual Beam and IREM(infrared emission microscope)
- chemical deprocessing and etching techniques of semi-conductor materials

Additional classes taken:

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| • Semi-conductor device physics | Boise State University |
| • AC electronics for RF plasma | Micron Technology |
| • Code of business conduct and ethics | Micron Technology |
| • Intro to RF plasma | Micron Technology |
| • Analytical trouble shooting and problem analysis | Micron Technology |
| • Reliability for logic and memory | Micron Technology |
| • Intermediate Statistical Process Control | Micron Technology |
| • Advanced Statistical Process Control | Micron Technology |
| • Patents for engineers | Micron Technology |

References available upon request

