

ASWIN THIRUVENGADAM

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Conditioned leader with a proven track record of innovations that impact product quality, time to market and financials

EXPERIENCE

JULY '18 – PRESENT

DISTINGUISHED MEMBER OF TECHNICAL STAFF, MICRON TECHNOLOGY

Leader for a memory R&D team responsible for delivering solutions for product development challenges. Solutions include the development of an easy-to-scale test and data management platform, media analysis for anomaly detection and media optimization.

SEP'13 – JULY'18

SENIOR MEMBER OF TECHNICAL STAFF, MICRON TECHNOLOGY

Product optimizations using data science techniques on Micron's big data infrastructure. Responsible for defining the architecture and demonstrating feasibility through prototyping.

APR'10 – SEP'13

PRINCIPAL ENGINEER, MICRON TECHNOLOGY

Technical lead to the team that delivered:

- Statistics and physics based models for field fail rate predictions of memory components
- Solid state drive reliability predictions using empirical models. Models included the impact of error correction codes, error handling routines and occurrences of bandwidth limiting issues
- Reliability of a phase-change memory based SSD prototype

MAR'08 – APR'10

SENIOR PRODUCT ENGINEER, NUMONYX

Technical lead responsible for delivering product configurations for minimizing field fail rate of the first phase-change memory based commercial product. Developed a high speed write algorithm for meeting performance specifications. Supported product engineering activities such as root cause analysis of cell and array failures

MAR'08 – APR'10

PRODUCT ENGINEER, INTEL CORPORATION

Array characterization and electrical failure analysis of Flash memories. Reliability characterization and assessment of various flash failure mechanisms. Responsible for delivering optimized configurations (trims) for minimizing field fail rate

EDUCATION

MAY '03

M.S, ELECTRICAL ENGINEERING

UNIVERSITY OF SOUTHERN CALIFORNIA

MAY '01

B.E, ELECTRONICS AND COMMUNICATION ENGINEERING

UNIVERSITY OF MADRAS

SKILLS

- Critical thinking and problem solving
- Project design, planning and management
- Team leadership and organization
- Objected oriented programming
- Data analysis and interpretation
- Clear and open communication

ACHIEVEMENTS

PATENTS: GRANTED, PENDING AND FILED

- **11 granted patents, 5 pending patents, 3 filed applications** in fields of application of machine learning for Solid State Device (SSD) management, machine learning tool for memory data analysis, memory design, memory architecture, tester design, tester architecture and error correction codes

PUBLICATIONS

- Lead author for 6 papers and coauthor for 4 papers, presented at Micron's internal Seminars, on topics of distributed testing architecture, tester design, application of machine learning for anomaly detection, application of machine learning for memory optimization and simulation tools for emerging memories

AWARDS

- Micron innovation award
- Best Talk, Nonvolatile products technical seminar (Micron Internal) 2017
- Best Poster, Nonvolatile products technical seminar (Micron Internal) 2018