Seraphine Goh

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WORK EXPERIENCE

Western Digital - Senior Software Modeling Systems Design Engineer **July '20 - Present**

Flash Product Engineering – Enterprise SSD – System Architecture

- Optimize performance, power, and latency metrics in enterprise SSD products through Python software modeling and batch simulations on AWS cloud compute (EC2) and storage (S3)
- Build features and internal tools to improve modeling fidelity, increase efficiency of data processing, and identify product enhancement recommendations for cross-functional teams (firmware, memory systems, etc.)
- Contribute to Python codebase with CI/CD practices using git, Jenkins, BitBucket, and Artifactory
- Process and visualize metric data with data processing tools including pandas, seaborn, and NumPy

Western Digital - Systems Design Engineering Intern **June '19 - Sept '19**

- Conducted an end-to-end investigation on decreasing workload latency spikes caused by DRAM congestion exhibited in enterprise SSDs
- Reduced congestion by 88.7% by implementing a write-transaction rate limiter in the in-house Python model for SSD performance

EDUCATION

University of California, Los Angeles **Sept '18 - June '20**

- M.S. in Electrical and Computer Engineering (GPA: 3.6/4.0)

University of California, Los Angeles **Sept '14 - June '18**

- B.S. in Electrical Engineering; Honors: *cum laude* (GPA: 3.7/4.0)

Engineering Courses

- *Computer Science*: Computer Science I/II, Computer Organization, Machine Learning, Neural Signal Processing, Applied Numerical Computing
- *Systems*: Systems Design, Embedded Systems, Security for Embedded Systems, Principles of Semiconductor Design
- *Circuits*: Circuits Laboratory I/II, Circuits Theory I/II, Digital Electronic Circuits, Logic Design of Digital Systems, Advanced Digital Integrated Circuits, Design of VLSI Circuits and Systems, Analog Electronic Circuits

Management Courses

- Finance and Marketing for Engineers, Entrepreneurship for Engineers, Business Law

SKILLS

- **Programming Languages**: Python, bash, C++, Java, JavaScript
- **CI/CD Pipeline Tools**: git, Gerrit, BitBucket, Jenkins, Artifactory
- **Technologies**: Jupyter Notebook, pandas, seaborn, matplotlib, NumPy, SQLite, MATLAB, React.js
- **Other**: Python scripting, shell scripting, data science, data analysis/visualization