

JOLLY PRADHAN

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EDUCATION

Massachusetts Institute of Technology
School of Engineering & Sloan School of Management
M.S., System Design and Management

Cambridge, MA
Sept 2015-Present

Rensselaer Polytechnic Institute
Bachelor of Science in Mechanical Engineering

Troy, NY
Dec 2009

EXPERIENCE

Varian Semiconductor Equipment Associates
Systems Engineer
Crion Cold Implant

Gloucester, MA
Sept 2010-July 2015

- Crion is a cold system that enables customer to implant wafers at -100°C. The system consists of cryo-chillers, a vacuum-sealed valve system, and cooling ring to cool the implant mechanism.
- Conducted and documented characterization tests for Crion by validating cool down rate, throughput, wafer temperature uniformity and overall functionality of the system.
- Operated the tool during 40 continuous hours of reliability growth testing and helped release the product from R&D to Production.
- Supported customer escalations by analyzing archives from the field and determining root cause of the customer problems.

26-Wafer Implementation

- Led the project with a team of mechanical engineers, an electrical engineer and software engineers to create new hardware as well as software controls to implement the platen warm-up process. Released the hardware through ECO process to Production and conducted tests to help with software release.

Center for Earthquake Engineering Simulation
Research Engineer

Troy, NY
Jan 10-Sept 2010

- Operated and troubleshooted earthquake simulation machinery (centrifuge) while conducting experiments.
- Gained hands-on experience by preparing and sealing centrifuge laminar container with Ph.D. students while using strain gauges, accelerometer, and pressure sensors.

LEADERSHIP POSITIONS

Fusion Engineering Development Program
Graduate

Sept 2010-Sept 2012

- This is a program for new graduates at Varian to expose them to various engineering departments within the company and to experience presenting to upper management.
- Rotated through End Station (Robotics), Continuous Improvement and Physics Department (R&D).

Women's Mentoring Program at RPI
Co-Chair

Sept 2006-Sept 2008

- Developed a new program providing opportunity for mentors and mentees to meet prior to the start of the school year. As a result of its success, this is now an annual program. Organized formal and informal events including: Chat with Shirley Ann Jackson (President of RPI) and Design Your Future Day to encourage women in science and engineering.

TECHNICAL SKILLS

- Expert in Signal Analysis and Archive Analysis
- Proficient in Microsoft Excel, Microsoft PowerPoint, MINITAB Statistics, Adobe Illustrator, and Adobe Photoshop. Basic knowledge 3D CAD Modeling (SolidWorks and ProE), LabVIEW, and MATLAB.