

# Padmabhushana R. Desam

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## Education

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**Massachusetts Institute of Technology**, Cambridge, MA

School of Engineering and Sloan School of Management

Master of Science in Engineering and Management

2013(expected)

System Design and Management Fellow

**The University of Utah**, Salt Lake City, UT

Doctor of Philosophy, Mechanical Engineering

2005

John Zink award for outstanding academic achievement

**National Institute of Technology**, Warangal, India

Bachelor of Technology, Mechanical Engineering

1998

## Professional Experience

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**Ubiquitous Energy**, Cambridge, MA

*Strategic Planning & Business Development*

Summer 2012

- Evaluated commercial building-integrated photovoltaics (BIPV) and mobile electronics markets and developed strategies for integrating transparent photovoltaics
- Identified potential market opportunities in mobile electronics, conducted economic analysis, and developed business models and solutions for profitability
- Contributed significantly to a \$5.5M ARPA-E proposal in commercializing BIPV by developing a cost model for production, modeling and optimizing LCOE, and calculating payback periods for investors

**The Babcock & Wilcox Company**, Barberton, OH

*Lead Engineer*

2006-2011

- Analyzed potential business opportunities in wind energy that could generate \$100M in revenues and made recommendations to senior management for strategic acquisition of operations and maintenance companies
- Developed innovative low-emission technologies and products for biomass combustion in power generation, which could save \$1M annually in operating expenses for customers
- Led collaborative efforts with Penn State University in conducting research on biomass, which resulted in an innovative low-emission combustion technology
- Improved existing new product development process with a robust fuzzy front end analysis

**CD-adapco**, Tulsa, OK

*Senior Consulting Engineer*

2005-2006

- Delivered novel combustion solutions for customers in power generation and chemical processing industries
- Collaborated with account and business development managers in maintaining key accounts worth \$5M by providing customized solutions

**ZPM Inc.**, Santa Barbara, CA

*Modeling Engineer*

2000-2001

- Developed a revolutionary separation technology for industrial wastewater treatment, which generated two patents for ZPM
- Designed and validated bubble separation tanks with applications in water treatment

## Software Skills

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Microsoft Office, System Advisor Model, @Risk, TreeAge, Vensim (System dynamics)

## Professional Organizations & Activities

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- Member of the MIT Energy conference organizing committee 2011-2012
- Active member of the MIT Energy and Sloan Energy clubs 2011-2012