

Arvind Kalidindi
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Education

Drexel University, Philadelphia, PA

Bachelor of Science in Mechanical Engineering, September 2010 - June, 2013 (Anticipated Graduation)

Cumulative GPA: 3.98

Honors and Awards

- Drexel University STAR Scholar – Conducting Undergraduate Research, June - August 2011
- 1st place overall, IEEE Freshman Design Poster Competition, June 2011
- Recognized for academic excellence, Dean's List, 2010-2011
- A.J Drexel Merit Scholar, 2010-2011
- Silver medalist (second place), Coriell Science Fair, Engineering Category, April 2009
- National Merit Semifinalist, 2009
- Advanced Placement (AP) Exams Scholar with Distinction, 2009
- Third place winner, Programming Competition, Rowan University, March 2006

Research Interests

Renewable Energy Systems, Electrochemical Energy Conversion and Storage,
Computational Modeling Material Characterization and Performance Diagnostics of Flow Battery Systems

Research Experience

Electrochemical Systems Laboratory , Advisor – Dr. Emin Caglan Kumbur <i>Undergraduate Researcher – Vanadium Redox Flow Battery and PEM Fuel Cells</i>	Drexel University, PA September 2010 – Present
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- Characterized the performance of novel membrane and electrode materials for vanadium redox flow batteries.
- Performed kinetic analysis of anodic and cathodic reactions of vanadium species.
- Developed a mathematical model to predict voltaic losses that occur during PEM fuel cell operation.

Computer-Aided Tissue Engineering Laboratory , Advisor - Dr. Wei Sun <i>Research Fellow</i>	Drexel University, PA Summer 2009 and 2010
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- Designed and tested scaffolds produced by a rapid prototyping machine and performed cell vitality studies.
- Co-authored research paper on optimization of scaffold design for growing bone tissue.

Nanomaterials Group , Advisor - Dr. Yury Gogotsi <i>Research Fellow</i>	Drexel University, PA June - September 2008
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- Researched functions of Carbon-Derived Carbides in manipulating the pore sizes in electrodes.
- Presented findings in the Coriell and Delaware Valley Science Fairs.

Teaching and Mentoring Experience

Freshman Design Course Sequence <i>Teaching Assistant and Peer Mentor</i>	Drexel University a, PA September 2011 – Present
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- Assisted students in designing effective camera shutter designs.
- Provided experience related to problem solving and engineering design processes.

Kumon Learning Center <i>Teaching Assistant</i>	Mount Laurel, New Jersey May 2009 – May 2010
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- Explained math and reading concepts to students from ages 5 to 18.
- Graded and provided feedback on homework assignments.

Activities and Affiliations

- American Society for Mechanical Engineers (ASME)
- Pennoni Honors College

Computer Skills

MATLAB, C++, Java, AutoCAD, HTML, Maple, Creo Elements (Pro/ENGINEER), Microsoft Office