

# Julia A. Belk

[www.jabelk.com](http://www.jabelk.com) | [jabelk@stanford.edu](mailto:jabelk@stanford.edu) | [Google Scholar](#)

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## Education

Stanford University 2017 –  
Ph.D. in Computer Science

Massachusetts Institute of Technology 2013 – 2017  
S.B. in Electrical Engineering (Course VI-I)  
GPA: 5.0/5.0

## Research Experience

MIT Power Electronics Group 2015 – 2017  
Research on microgrids for energy access in developing countries. Formulated network stability criteria and control algorithms, wrote code, built hardware, published papers, and deployed microgrid in rural Indian village.

## Industry Experience

SpaceX — *Power Electronics Design Team* SUMMER 2016

## Awards and Honors

- Stanford Graduate Fellowship (with NSF, 5 years full funding) 2017 – 2022
- NSF Graduate Fellowship (3 years partial funding) 2017 – 2020
- MIT Engineering: Outstanding Undergraduate Research Project (top 2) 2016
- MIT Engineering: Outstanding Undergraduate Research Presentation (top 12) 2016
- Member of Tau Beta Pi, Eta Kappa Nu 2016
- 1<sup>st</sup> Place Prize Paper Award (IEEE ECCE, see [1]) 2015
- World Champion: Women's Flatland Unicycling (1<sup>st</sup> Place, UNICON XVI, Italy) 2012

## Refereed Publications

- [4] J. A. Belk, W. Inam, D. J. Perreault and K. Turitsyn,  
"Stability and Control of Ad Hoc DC Microgrids,"  
IEEE 55th Conference on Decision and Control (CDC), 2016.
- [3] W. Inam, J. A. Belk, K. Turitsyn and D. J. Perreault,  
"Stability, control, and power flow in ad hoc DC microgrids,"  
IEEE 17th Workshop on Control and Modeling for Power Electronics (COMPEL), 2016.
- [2] A. J. Hanson, J. A. Belk, S. Lim, C. R. Sullivan and D. J. Perreault,  
"Measurements and performance factor comparisons of magnetic materials at high frequency,"  
IEEE Transactions on Power Electronics (TPEL), 2016.
- [1] A. J. Hanson, J. A. Belk, S. Lim, D. J. Perreault and C. R. Sullivan,  
"Measurements and performance factor comparisons of magnetic materials at high frequency,"  
IEEE Energy Conversion Congress and Exposition (ECCE), 2015.  
**William Portnoy First Place Prize Paper Award, Devices/Components Track**