

## Hema C. P. Movva

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Austin, TX, USA

<b>Education</b>	Ph.D., Electrical Engineering, The University of Texas at Austin M.S.E., Electrical Engineering, The University of Texas at Austin B.Tech., Electrical Engineering, Indian Institute of Technology Bombay	Ongoing May '12 May '09
<b>Select Publications</b>	HCP Movva et al., Density-Dependent Quantum Hall States and Zeeman Splitting in Monolayer and Bilayer WSe <sub>2</sub> , Phys. Rev. Lett. 118, 247701 (2017)  HCP Movva et al., High-Mobility Holes in Dual-Gated WSe <sub>2</sub> Field-Effect Transistors, ACS Nano 9, 10402 (2015)  HCP Movva et al., Self-Aligned Graphene Field-Effect Transistors with Polyethyleneimine Doped Source/Drain Access Regions, Appl. Phys. Lett. 101, 183113 (2012)	
<b>Experience</b>	<b>Research Assistant</b> , The University of Texas at Austin <ul style="list-style-type: none"><li>• Ph.D. advisors: Emanuel Tutuc, Sanjay Banerjee</li><li>• Electrical transport in transition metal dichalcogenide (TMD) heterostructures</li><li>• Fabrication of FETs using atomically thin TMDs such as WSe<sub>2</sub>, MoS<sub>2</sub>, etc.</li><li>• Magnetotransport measurements in high-mobility TMD FETs</li><li>• Tunneling phenomena in TMD heterostructure FETs</li></ul> <b>Research Assistant</b> , The University of Texas at Austin <ul style="list-style-type: none"><li>• M.S.E. advisor: Sanjay Banerjee</li><li>• Surface charge transfer doping of graphene for use in self-aligned FETs</li><li>• Fabricated graphene FETs with chemically doped source/drain access regions</li></ul> <b>Engineer R&amp;D</b> , Solar Semiconductor Inc., Hyderabad, India <ul style="list-style-type: none"><li>• Modeled wattage losses in c-Si photovoltaic modules</li><li>• Developed distributed circuit models for c-Si solar cells and modules</li></ul> <b>Circuit Design Intern</b> , Texas Instruments, Bangalore, India <ul style="list-style-type: none"><li>• Designed a high-speed dynamic latch based voltage comparator</li><li>• Designed a 250 MSPS 6-bit SAR analog-to-digital convertor</li></ul>	Ongoing  Aug '10 - May '12  Jun '09 - Aug '10  May '08 - Aug '08
<b>Honors</b>	Best Paper Award, 74 <sup>th</sup> IEEE Device Research Conference Best Poster Award, 73 <sup>rd</sup> IEEE Device Research Conference Silver Medal at the 37 <sup>th</sup> International Physics Olympiad National Talent Search scholarship, India	2016 2015 2005 2003
<b>Service</b>	<b>Reviewer</b> , IEEE Trans. Electron Dev., ACS Appl. Mater. Interfaces <b>President</b> , Japan Karate Association of Austin	 May '13 - May '15
<b>Skills</b>	<u>Fabrication</u> : Electron-beam lithography, standard cleanroom processing <u>Electrical</u> : Semiconductor parameter analyzers, probe stations, He cryostats <u>Metrology</u> : Atomic force microscopy, scanning electron microscopy <u>Software</u> : MATLAB, LabVIEW, C	