

Sridevi V. Sarma  
Massachusetts Institute of Technology  
Harvard Medical School

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Dear Search Committee,

I am writing to apply for your tenure-track faculty position opening. I received my **PhD in Electrical Engineering and Computer Science from M.I.T.** in February 2006. Currently, I am a postdoctoral research fellow in the area of **Computational Neuroscience with a dual appointment between M.I.T. and Harvard Medical School.**

Although my dissertation entails systems modeling and advanced control theory, I minored in neuroscience during my graduate studies to ultimately pursue an academic career that will enable me to develop and use advanced engineering tools to create and improve treatments for neurological diseases. I plan to address both theoretical and implementation challenges that arise when modeling and altering the behavior of pathological neural systems.

Currently, I am pioneering two projects to improve deep brain stimulation therapies for Parkinson's disease using advanced signal processing, estimation and control tools. My proposed engineering methodology for improving DBS has also been reviewed and endorsed by the medical and life sciences community as I am a **2008 recipient of the prestigious \$500,000 Burrough's Wellcome Fund Career Awards at the Scientific Interface.** This award will help launch a successful academic career and help nurture more collaborations with engineers, neuroscientists, neurologists and neurosurgeons.

My plans are detailed in the enclosed statements of my professional interests. Thank you for your consideration and I wish to express my sincere hope in joining your outstanding faculty.

Sincerely,

Sri Sarma