Research Visit at MIT

Ayush Bhandari*
(Dated: March 01 2015)

Keywords: Inverse problems, Signal Processing, Time-of-Flight/3D Imaging, Approximation Theory, Digital Communication.

HOW TO APPLY EFFICIENTLY?

Without any doubt, MIT offers world class research environment and infrastructure. Proximity to Harvard and Boston University makes it even more diverse in sense of scientific expertise and collaborations. At our lab, we work on the interface of theory and practice with applications pivoted around the theme of unconventional computational imaging. Thus, when applying, it is important to highlight your exact background. Here is a list of things that is useful for establishing a strong collaboration.

- **Level of Study:** I prefer to collaborate with Masters and PhD level students. This is mainly because the length of visit is at least six months. That said, each year I do work with high school and UG students at MIT but this is less of a collaboration (and more of development/mentoring).

- **Background:** When you are applying for a visit, please specifically mention your background and areas where you think you can contribute. Make this available via your CV.
  - **Theory** If you are interested in theoretical aspects of our work, please mention your background in signal processing, applied mathematics and algorithms. Ideally, previous exposure to tools such as optimization is a plus. You should be proficient in Matlab. Finally, your expertise and communication skills should be demonstrated by your publications/course reports around the topic.
  - **Practice** If you are interested in hardware or experimentation, you should highlight your skills in cross platform programming, knowledge of electronics and previous experience with variety of sensors.

- **Length of Visit:** At least six months.

Please try to keep your email terse and make the best use of your CV.

*Personal* I am not interested in publishing papers because it helps you graduate. I am happy to work or collaborate with anyone who is genuinely interested in high quality research problems and is enthusiastic about ideas and rediscovery of ideas. If publications follow such a collaboration, even better!

* Electronic address: ayush@MIT.edu or Ayush.Bhandari@googlemail.com; Any information on my website or attachments downloaded from there have nothing to do with the general policy of MIT.