***G**raduate **R**esearch and **E**ducation for **A**ppropriate **T**echnology: **I**nspiring **D**irect **E**ngagement and **A**gency*

Appropriate Technology as a Viable Alternative for Engineering Research and Career Development

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Mechanical Engineering Graduate Seminar
Wednesday September 18, 5:30PM
Edificio Lucchetti, Room 241

Appropriate Technology (AT) is traditionally understood as "simple" technology that applies primarily to underdeveloped and/or poor communities. While many engineers and scientists contribute greatly as volunteers to address the concerns such communities, relatively few organize their research efforts and career trajectories around such matters. We conjecture that this is partly because AT is considered to be behind the frontier of technological innovation (with the implication that AT is not sufficiently technical or scientific enough to count as research), partly because the enterprises that fund research and development in engineering and science (both government and private industry) do not sponsor work in AT, and partly because few jobs oriented around AT exist for engineers and scientists.

As a primer, we will first explore traditional models and essentials for undertaking and sponsoring graduate research and subsequent career planning for engineers. We will then examine AT more closely to discuss the extent to which traditional attitudes of AT are valid, and the extent to which research in AT aligns with the traditional paradigm for graduate research. Finally, we will consider broader skills that are required for researchers who want to pursue AT.

Christopher Papadopoulos is an Associate Professor in the Department of Engineering Science and Materials at the University of Puerto Rico, Mayagüez. He earned his BS degrees in Civil Engineering and Mathematics at Carnegie Mellon University, and his PhD in Theoretical and Applied Mechanics at Cornell University. He is the Principal Investigator of the GREAT IDEA Project and mentors several graduate students who are conducting research in Appropriate Technology. He also investigates Structural Mechanics, Biomechanics, Mechanics Education, and Engineering Ethics.

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