NSERC CREATE **TOP-SET** Un programme *FONCER* du CRSNG

Séminaire

Le lundi 6 novembre 2023, 13h
ARC 233 et MS Teams
Le séminaire se déroulera en anglais.

Seminar

Monday, November 6, 2023, 1 p.m.
ARC 233 and MS Teams

Leveraging open hardware to slash the costs of solar photovoltaic research

Joshua Pearce, Western University

Abstract: Solar photovoltaic (PV) electricity generation has the most potential of maintaining our energy-intensive civilization while preventing the destruction of our climate with greenhouse gas pollutants. Although the fastest growing and now lowest-cost energy source in history, terawatts of PV are still needed. This demands both continued technical innovation, further cost reductions and mass global scaling. One proven approach to accelerating innovation and cutting costs in open source innovation. This presentation will look at examples of applying open source innovation to both software and hardware for PV research and development as well as deployment. Open hardware that can reduce lab costs frees money for more researchers and experiments. It also allows for more rapid replication and further development. Thus, open approaches in PV speed innovation, lead to more citations, more exposure, greater impact, improves the quality of researchers and enables mass collaboration. This presentation will provide a map for researchers wishing to expand the scale of their contributions on arguably the most important problem of our generation – stabilizing carbon emissions.

Bio: Joshua Pearce is the Thompson Chair in Innovation in the Ivey Business School and the Department of Electrical & Computer Engineering at Western University. He runs the Free Appropriate Sustainability Technology (FAST) research group, whose research spans of solar photovoltaic engineering and agrivoltaics, open hardware, distributed recycling, RepRap 3-D printing, as well as policy and economics. He is one of the most cited scientists globally and is ranked in the top 0.1% in Academia.

TOP-SET est un programme de formation FONCER du CRSNG en puissance optoélectronique ayant pour but de façonner une cohorte de personnel hautement qualifié détenant des connaissances approfondies en systèmes optoélectroniques pour joindre les rangs d'équipes de recherche et développement.

Pour de plus amples renseignements sur TOP-SET, veuillez consulter create-topset.eecs.uottawa.ca/fr/accueil/.

NSERC CREATE Training in Optoelectronics for Power: from Science and Engineering to Technology (**TOP-SET**) is a training program that aims to form a cohort of highly qualified personnel with comprehensive understanding of optoelectronic systems, capable of joining advanced R&D teams.

For further details regarding TOP-SET, go to create-topset.eecs.uottawa.ca.

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