

Primary Purpose:

We are searching for a bright and enthusiastic individual to join our team as a postdoctoral fellow in the area of modeling & simulation of plants and crops. This is part of the “Mechanistic Modeling of Plant Development for Plant Phenomics” theme of the P²IRC project. Specifically, the role will involve modeling, simulation of plants, and creating models incorporating biomechanical properties. The ideal candidate will have strong computer programming skills and a keen interest in computer graphics and biological modeling. The position will be co-supervised by Drs. Przemyslaw Prusinkiewicz and Ian McQuillan at both the Department of Computer Science at the University of Calgary and the Department of Computer Science at the University of Saskatchewan. The location of the position, being in Calgary, Saskatoon, or combined is negotiable.

The “Mechanistic Modeling of Plant Development for Plant Phenomics” theme in P²IRC consists of an interdisciplinary and collaborative team consisting of seven faculty and their graduate students. The team is led by Drs. Przemyslaw Prusinkiewicz and Ian McQuillan. More information is available at <https://www.cs.usask.ca/research/phenotyping-centre/>.

Context:

The Plant Phenotyping and Imaging Research Centre (P²IRC) is an agricultural research centre managed by the Global Institute for Food Security (GIFS) and located at the University of Saskatchewan. P²IRC was established thanks to funding awarded to the University of Saskatchewan by the Canada First Research Excellence Fund award, Designing Crops for Global Food Security.

GIFS (www.gifs.ca) was founded in 2012 to perform research that will help deliver transformative innovation to agriculture in both the developed and the

developing world. Research at GIFS can be divided into three pillars; seed and developmental biology, root-soil-microbial interactions, and digital and computational agriculture. The latter pillar is occupied by P²IRC.

P²IRC's seven-year transdisciplinary program will transform crop breeding through research in phenometrics, image acquisition technologies, computational informatics of crop phenotype data, and societal and developing world impact. P²IRC (<http://p2irc.usask.ca/>) is a major research centre with partners located on campus, across Canada, and internationally.

Application Procedure:

Send an email a cover letter indicating their interest and experience, a CV, and transcripts from university degrees to plant_modeling_position@cs.usask.ca Inquiries regarding the position can be directed to Dr. Przemyslaw Prusinkiewicz (pwp@ucalgary.ca) or Dr. Ian McQuillan (mcquillan@cs.usask.ca). Applications will begin to be reviewed Nov 20, 2017, and continue until a suitable candidate is found. We appreciate all expressions of interest; however, only those candidates whose backgrounds best suit our requirements will be contacted. All application materials will be treated confidentially. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents of Canada will be given priority.