Vivek Rai

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Education

B.Tech & M.Tech (Integrated) - Biotechnology (8.65/10)   May 2017
Indian Institute of Technology Kharagpur, India

Research Experience

Institute for Systems Biology — Seattle, WA
Dr. Gustavo Glusman, Research Intern   May 2016 – July 2016

- Analyzed sex-specific technological biases in the whole-genome sequencing pipelines.

Indian Institute of Science — Bangalore, India
Prof. Sandhya M. Visweswariah, Research Intern   May 2015 – July 2015

- Fluorescent labeling and lipid phase dependence study of E.coli ClyA pore-forming protein.

Development Experience

Google Summer of Code — Google Inc.,
openSNP (OBF), Developer   May 2016 – Aug 2016

- Developed algorithm to link the Phenotypes with Genotypes (SNPs) in OpenSNP portal.
- Implemented database models and visualizations to view the linkage information.

Individual Engagement Grant — Wikimedia Foundation
WHGI, Developer   Apr 2015 – Jan 2016

- Analyzed Wikidata to visualize gender bias across categories, performed statistical analysis.
- Developed the WHGI portal, coauthored paper, contributed to research and community efforts.

Wurm Lab — Queen Mary University of London
Sequeneserver, Developer   Apr 2014 – Jan 2016

- Developed backend data and output parser module in Ruby, designed graphical overview scheme.
- Contributed more than 110 commits over an year and co-authored the research paper.

Skills

Programming Languages: Python, R, BASH (shell sripting), SQL, JavaScript
Operating Systems: Linux/Unix
Software: Git, Vim, LaTeX, CLI

Coferences and Publications

- Priyam, Woodcraft, **Rai** *et al.*, "Sequenceserver: a modern graphical user interface for custom BLAST databases." `http://sequenceserver.com` — Bioarxiv
- Klein, Gupta, **Rai** *et al.*, "Monitoring the Gender Gap with Wikidata Human Gender Indicators" — OpenSym, 2016
- Winter School — Quantitative Systems Biology, 2016

Activities

- iGEM, IIT Kharagpur — Wet lab, Core Team Member
- metaKGP, Open Wiki and community — Administrator (Present)
- Hackerrank, Ruby Programming Language — Problem Setter

Awards

- Awarded first prize in Wikidata competition 2016 organized by ISCB.
- Awarded third prize in Wikipedia competition 2016 organized by ISCB.
- Awarded Department of Biotechnology - GATE scholarship in 2016-17.
- Awarded tution scholarship throughout 2012-2016.