

Vivek Rai

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vivekiitkgp.github.io

Education

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

May 2017

Research Experience

Institute for Systems Biology — Seattle, WA
Dr. Gustavo Glusman, Research Intern

May 2016 – July 2016

- Characterized sex-specific autosomal biases in the human whole-genome sequences across various technologies.

Indian Institute of Science — Bangalore, India
Prof. Sandhya M. Visweswariah, Research Intern

May 2015 – July 2015

- Performed fluorescent labeling and did a 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 exploratory data analysis.
- Developed the WHGI portal, co-authored paper, and contributed to research and community efforts.

Wurm Lab — Queen Mary University of London
Sequeneserver, Developer

Apr 2014 – Jan 2016

- Developed data and output parser module for Rails backend framework, and designed graphical overview scheme (115+ commits).
- Contributed to website design and upgrade, feature development, and co-authored the research paper.

Skills

Programming Languages: Python, R, Ruby, BASH (shell scripting), SQL, JavaScript
Operating Systems: Linux/Unix
Software: Git, Vim, L^AT_EX, CLI

Coferences and Publications

- Priyam, Woodcraft, **Rai et al.**, “Sequeneserver: a modern graphical user interface for custom BLAST databases.” <http://sequeneserver.com> — Bioarxiv
- Klein, Gupta, **Rai et al.**, “Monitoring the Gender Gap with Wikidata Human Gender Indicators” — Open-Sym, 2016
- ICTP-ICTS Winter School — Quantitative Systems Biology, 2016

Activities

- iGEM, IIT Kharagpur — Wet lab, Core Team Member
- metaKGP, Open Wiki and community — Maintainer (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 tuition scholarship throughout 2012-2016.