KATHRYN IVERSON

Bioinformatics & Pipeline Engineering

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EXPERIENCE

Bioinformatics Analyst, DataOps

Second Genome

August 2017 – Present | South San Francisco, CA

- Designed, developed, and deployed data analysis pipelines at scale on AWS for drug discovery in python and bash
- Utilized AWS technologies to scale and improve metagenomics pipeline that handles >1TB of data daily
- Maintained and expanded proprietary R packages for building publication quality reports for clients and internal data analysis
- Designed and developed user interface for internal datawarehouse
- Managed two intern developers who assisted in pipeline application development

Bioinformatics Analyst, Solutions

Second Genome

April 2016 – August 2017 | South San Francisco, CA

- Analyzed microbiome data for clients and wrote scientific reports
- Presented detailed scientific findings to clients and non-experts, highlighting actionable insights
- Presented company analysis capabilities to potential clients and assisted sales team by addressing technical questions from clients

Programmer Analyst

University of Michigan

June 2011 – April 2016 | Ann Arbor, MI

- Software developer for mothur, the most widely cited tool for characterizing microbial communities
- Established data analysis protocol for leading microbial ecology lab and trained colleagues using reproducible research methods
- Worked with internal and external collaborators analyzing microbial community data

PUBLICATIONS

The dynamics of a family's gut microbiota reveal variations on a theme
PD Schloss, **KD Iverson**, JF Petrosino, SJ Schloss. *Microbiome*, 2014
microbiomejournal.biomedcentral.com/articles/10.1186/2049-2618-2-25

The Gut Microbiome Modulates Colon Tumorigenesis
JP Zackular, NT Baxter, **KD Iverson**, WD Sadler, JF Petrosino, GY Chen, PD Schloss. *mBio*, 2013
mbio.asm.org/content/4/6/e00692-13.short

Stabilization of the murine gut microbiome following weaning
PD Schloss, AM Schubert, JP Zackular, **KD Iverson**, JF Petrosino. *Gut Microbes*, 2012 tandfonline.com/doi/abs/10.4161/gmic.21008

HOW I WORK

Collaborator
Worked with several academic collaborators and industry clients to provide expert microbiome analysis for publication and IP development

Domain expert
7 years of microbiome experience, working closely with bench scientists on cutting edge research

Leader
Initiated and organized company hackaton to spark new project ideas and encourage cross-team collaboration

TOOLS & EXPERTISE

AWS | Docker | git | Linux
Mac | Shiny & Rmarkdown | LaTeX

Microbiome | Bioinformatics
Metagenomics | Microbiology
Statistics | Reproducible Research

LANGUAGES

Python	●●●●●
R	●●●●○
Bash	●●●○○
C/C++	●●●○○
SQL	●●●○○
Java	●●○○○

EDUCATION

M.S. in Bioinformatics

University of Michigan, Ann Arbor

2009 – 2011

B.A. in Biology

Earlham College

2004 – 2008

"Relentlessly curious, without fear or prejudice."