

Christopher Rosenthal

Seattle, WA

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Experience

Principal Bioinformatics Scientist

2012 - Present

University of Washington Department of Laboratory Medicine, Seattle, Washington

Principal developer of research and bioinformatics software for next-gen sequencing molecular microbiology assays.

Author of several bioinformatics methods sections in research and clinical publications.

Successfully expanded the bioinformatics core team from three to ten bioinformatics software engineers.

DevOps Software Developer Engineer

2009 - 2012

The Seattle Times Company, Seattle, Washington

Responsible for support and scalability of software applications and other digital technologies.

Optimized legacy content management code base and server infrastructure to streamline software engineering development and support.

Successfully worked with journalists and nontechnical stakeholders engineering, testing and deployment of many software applications.

Graduate Student

2007 - 2009

Indiana University School of Informatics and Computing, Bloomington, Indiana

Thesis Project: Using genomics to map disease in coral reef ecosystems.

Software Engineer

2005 - 2007

Regenstrief Institute, Indianapolis, Indiana

Software Engineer

2003 - 2005

Indiana University Department of Chemistry, Bloomington, Indiana

Education

Indiana University, Bloomington, Indiana

M.S., Bioinformatics, 2009

B.S., Computer Science with Honors, 2005

Biology Minor

Skills

Portfolio: <https://github.com/crosenth>

Software Languages: Python, Java, Perl, R, Lisp, SQL and more

Python Data Libraries: Pandas, Numpy, Scipy, Biopython, Scons

Databases: Postgres, SQLite, MySQL, HSQL, Oracle, MS SQL Server

Productivity: Ubuntu Linux, Vim, Git, tmux, Bash scripting, cloud computing, AWS and more

Personal Interests

Mobile software technologies, Sailing, Fishing, Crabbing, Crossfit, Hockey

Publications

- [1] *Clinical Next Generation Sequencing Outperforms Standard Microbiological Culture for Characterizing Polymicrobial Samples*, Clinical Chemistry, 2016
- [2] *Performance Comparison of Illumina and Ion Torrent Next-Generation Sequencing Platforms for 16S rRNA-Based Bacterial Community Profiling*, Applied Environmental Microbiology, 2014
- [3] *Molecular Diagnosis of Actinomyces madurae Infection by 16S rRNA Deep Sequencing*, Journal of Clinical Microbiology, 2013
- [4] *Rapid 16S rRNA Next-Generation Sequencing of Polymicrobial Clinical Samples for Diagnosis of Complex Bacterial Infections*, PLoS One, 2013