Christopher Tastad | Resume

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Education

Bioinformatics, MS — **Minneapolis, MN**
University of Minnesota, Bioinformatics and Computational Biology — *2020*
Thesis: Copy number variation in ovarian cancer from single cell and whole exome sequencing data.

Biochemistry, BS — **Minneapolis, MN**
University of Minnesota, College of Biological Sciences — *2011*

Skills

Languages: R, BASH, Python, LaTeX, SQL, HTML, CSS, XML, JSON

Platforms: Linux (Ubuntu, RHEL, CentOS), git, Nginx, Apache, HPC, AWS, PostgreSQL, Docker, Oracle, WordPress

Statistics: Hypothesis testing, Simple/Multiple/Poisson Regression, Hidden Markov Model, A/B Testing, Contingency Testing, ANOVA, Survival Analysis, K-means, PCA, K-nearest neighbor

Genomics: 10x single cell, samtools, bwa-mem, bedtools, Seurat, VarScan2, Excavator, DNAcopy, parallel

Benchwork: DNA/RNA/protein isolation and analysis, western blotting, PCR, ELISA, luciferase, immunostaining, histology, epigenetic analysis, FACS, mammalian cell culture

Experience

Graduate Research Assistant — **Minneapolis, MN**
University of Minnesota Dept. of OBGYN, Starr Lab — *May 2019 — Present*
- Executed full rewrite of cancer gene web app: deployed new ETL framework, reduced codebase, removed need for SQL database.
- Applied bioinformatic focus into copy number variation on a largest of its kind single-cell sequencing human cancer dataset.
- Developed pipeline to automate analysis process from raw data to figures, incorporating HMM and FastCall algorithms.

Graduate Research Assistant — **Minneapolis, MN**
National Marrow Donor Program, Bioinformatics — *Jan 2016 — July 2017*
- Employed scientific method as an investigator in a corporate R&D department with a focus in hematological cancers.
- Took both basic and clinical approach to investigation in cell therapy, immunology, and organ transplant genetics.
- Aided development of initiative around IP generation using existing company technology and 13 million patient database.

Biorepository Technician — **New Brighton, MN**
National Marrow Donor Program, Research Repository — *Sept 2014 — Jan 2016*
- Conducted specimen processing in high-throughput clinical laboratory facility, processing 1000s of samples per day.
- Managed 300k patient database and long-term storage for FDA and Clinical Trials Network samples using GLP.
- Contributed to larger registry activities maintaining Be The Match patient-donor sample receiving, storage, and typing.

Co-founder — **St. Anthony, MN**
Face to Face Organics LLC. — *July 2012 — Jan 2014*
- Co-founded a personal care products start up that connected social activism with our product and its use.
- Deployed company's operating software stack on limited budget with minimal upfront cost or sustained overhead.
- Established company systems around e-commerce, CRM, distribution, logistics, accounting, sales tracking, and inventory.

Research Associate — **Minneapolis, MN**
The Stem Cell Institute, Asakura Lab — *Dec 2007 — Jan 2013*
- Performed basic science research with a focus in skeletal muscle development, receiving 4 co-authorships.
- Well versed in full spectrum of molecular biology, histology and cell biology wet lab techniques and diagnostics.
- Authored significant writing efforts for group manuscripts and major grant awards, including a successful R01 bid.

Teaching Assistant — **St. Paul, MN**
University of Minnesota, CBS BIOL2004 — *Sept 2009 — May 2012*
- Led teaching lab that included an integrative, research-focused curriculum, highlighting significant independent discovery.
- Consistently called on by course instructor for consultation in the improvement of course materials and curriculum.
- Received highest rating among all course TAs as indicated by students in post-semester evaluations for 2012 year.