# **Christopher Tastad** | Resume

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# **Education**

**Bioinformatics** Minneapolis, MN

University of Minnesota, Bioinformatics and Computational Biology

Dec 2019

Capstone: Copy number variation in ovarian cancer from single cell and whole exome sequencing data.

Minneapolis, MN

University of Minnesota, College of Biological Sciences

May 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

# **Experience**

#### **Computational Biologist**

Minneapolis, MN

University of Minnesota Dept. of OBGYN, Starr Lab

May 2019 — Present

- o Executed full rewrite of cancer gene web app: deployed new framework, reduced codebase, removed need for SQL database.
- o Applied bioinformatic focus into copy number variation on a largest of its kind single-cell sequencing human cancer dataset.
- o Developed pipeline to automate analysis process from raw data to figures, incorporating HMM and FastCall algorithms.

## **Load Planning Engineer**

Minneapolis, MN

UPS, Industrial Engineering

Oct 2018 — Present

- o Primary authority in guiding all load functions for 112 outbound doors; mediating hub, feeder, and engineering priorities.
- o Advance district level interests through industrial engineering technologies for operational, flow, and system analysis.
- o Generate daily cost savings through identification and elimination of trailer runs which average to a value of \$500-1000.

## **Graduate Research Assistant**

Minneapolis, MN

National Marrow Donor Program, Bioinformatics

Jan 2016 — July 2017

- o Employed scientific method as an investigator in a corporate R&D department with a focus in hematological cancers.
- o Took both basic and clinical approach to investigation in cell therapy, immunology, and organ transplant genetics.
- o 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.
- o Managed 300k patient database and long-term storage for FDA and Clinical Trials Network samples using GLP.
- o 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
- o Co-founded a personal care products start up that connected social activism with our product and its use.
- o Deployed company's operating software stack on limited budget with minimal upfront cost or sustained overhead.
- o 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

- o 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.
- o Consistently called on by course instructor for consultation in the improvement of course materials and curriculum.
- o Received highest rating among all course TAs as indicated by students in post-semester evaluations for 2012 year.