TIM FARRELL

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SUMMARY

- Biomedical data engineer/ scientist with 3+ years technical experience.
- 5+ years organizational management experience as US Army Reserves Medical Services Officer.
- Motivated, creative, organized and quality-obsessed.

EDUCATION

Master of Science, Bioinformatics, Boston University, 2014-2016
Project: *Clinical sequencing antigenic classifier for structurally-variant genotypes*
GPA: 3.02/ 4.0

Bachelor of Science, Biomedical Engineering, Rutgers University, 2008-2012
Project: *Optimization of localizable stem-cell-based immunotherapeutic*
GPA: 3.31/ 4.0

TECHNICAL SKILLS

Software development tools: Trello, git, docker, Jira, Google Cloud

Web development: Flask, Django, Bootstrap, React, Google App Engine

Languages: Python, shell, SQL, R, Java, C/C++, Javascript, Haskell, Racket

Bioinformatics: samtools, bedtools, pysam, bwa, GATK, WDL, FireCloud, vcftools, pyvcf, Hail

Data science: PyData stack (pandas, matplotlib/seaborn, scikit-learn), jupyter, Keras, TensorFlow

EXPERIENCE

Assoc. Computational Biologist I, Broad Institute of MIT and Harvard, 2017-present
Provide genomics data processing, management and analysis expertise to Malaria Group, Infectious Disease and Microbiome Program. Projects include:
(a) analyzing/ managing 60K+ amplicon sequencing samples from vaccine clinical trial;
(b) developing 3 genomic analysis pipelines and deploying to cloud-based platform (FireCloud);
(c) processing ~200-300+ samples/ month through the above pipelines for various projects; and
(d) developing web interfaces for group computational tools (broad.io/coil).

Medical Services Officer (Reservist), US Army Reserves/ National Guard, 2012-present
Part-time (2-4 days/ month + 2-4 weeks/ year) military leader. Positions include Battalion Medical Operations Officer, Company Executive Officer and Health Services System Manager (current).

Operations Officer (Activated Reservist), US Army Reserves, 2016-2017
Deployed for 9-month tour overseas. 2nd-in-command for 80-Soldier Battalion Headquarters Company. Managed subordinate leaders, planned/ supervised unit operations and designed/ implemented policy.

Biomedical Informatics Intern, Harvard Medical School, 2015-2016
Engineered genomics-based classifier for blood antigen haplotypes using NGS + 3GS technologies.

Research Assistant, Boston University, 2015-2016
Built data processing pipeline for functional connectivity study of Human Connectome Project data.

Research Assistant, Boston University School of Medicine, 2014-2015
Built automated data management and analysis system for 24-primate drug metabolism study.