**About Me**

Key interest

* Simplifying complex data and making it so everyone can learn
* Doing things understandable by anyone
* Passionate about continued learning (especially computational biology)
* Passionate about UI design and web services
* Like to simplify and understand and work with data

Key Stories (STAR)

* Current Role at OSU

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Old** | **New** | **Reduction** |
| **Files** | 2,191 | 256 | 12% |
| **Folders** | 434 | 36 | 8% |
| **Size** | 503 | 135 | 26% |

* Radiation Biology
* Detection Software
* Wishlist and ShareShare
* Beaver Job Blasts
* Departmental Analysis
  + 80 page and 5 page report
* New tools for designers
* OSU Staff Drive

**Point 1:** Enthusiastic about finding quantitative insights in complex data

Experience

**Point 2:**  Passionate about open source software and sharing of information

Experience

**Point 3:**  Develop interactive Tools to enable clinicians and researchers to understand issues

Experience

**Point 4:**  Experience in thinking analytically

Experience

**Point 5:**  Experience in developing software tools

Experience:

**Point 6:**  Organized self starter who enjoys freedom in solving computational challenges

Experience

**Responsibilities**

**Point 1:**  Develop and extend analytics and data management applications to facilitate management and analysis of genomics, clinical and imaging data

Experience

**Position**

**Role**

* Next generation care through leveraging big data analytics
* Fight Disease
* Values
  + Open source data
  + Open source Code
  + Collaborative Team Science

**Position Duties**

* Genomic Imaging
* Clinical Analysis applications
* Passionate about open source software and sharing of information
* Enthusiastic about finding quantitative insights in complex data
* Develop interactive Tools to enable clinicians and researchers to understand issues
* Experience in thinking analytically
* Experience in developing software tools
* Organized self starter who enjoys freedom in solving computational challenges

**Responsibilities**

* Develop and extend analytics and data management applications to facilitate management and analysis of genomics, clinical and imaging data
* Establish and maintain standards for structure software and systems engineering
  + Requirements
  + Design, code, test, quality
* Provide documentation and user support allowing computational researchers across campus to access and re-use analysis tools
* Develop tools to integrate commonly used open source bioinformatics software applications
* Participate in leading international efforts aimed at establishing best practices and standards for genomic data representation and analysis
* Convey expertise across domains

**OHSU- Department**

* Our team supports OHSU researchers with their discovery-based original research projects, by providing analytics and resources that assist with locating, processing and analyzing large amounts of data. In addition, the goal of the department is to build a program that promotes collaboration in and outside of the institution and breaks down the traditional silo's found in academia.
* Goals
  + OHSU will lead the next generation of genomically guided therapies and early detection by discovering novel data-driven genotype/phenotype association inferred from large-scale analytics, and translating them to benefit clinical care. To enable this vision, the computational biology program will be guided by the following priorities:
  + Demonstrate benefit to patients through advances in big data analytics
  + Enable scientific goals of cross-departmental programs/projects
  + Establish OHSU as a world leader in computational biology research
* Strategies
  + **Move OHSU into the big data era through organizational structures, systems, and values fostering goal-directed team science**
  + Engage researchers to continuously build on work of colleagues around priority projects with high value-add across multiple basic science projects
  + Initial build focus on integrative data analysis (including omics and imaging data) to predict disease phenotypes from clinical and genetic information
  + Future build focus on early detection
  + Develop strategic partnerships with world-leading efforts in priority areas
* Objectives
  + Align existing efforts through standardization of tools and systems
  + Build expertise in advanced probabilistic inference methods for integrative data analysis
  + Build expertise in high-level, team oriented software development
  + Create a transparent, accessible body of data inter-operable with large-scale public data sources
  + Advance research goals across multiple basic science initiatives
* Key Points
  + You can only learn what you can measure. Now we have access to measurement technologies and data accumulation technologies that are really remarkable, and they’re generating a tremendous amount of data. We now have a wealth of information: clinical data, personal data, genomic data. All of these are giving us amounts of information that even five years ago was unimaginable.

**Questions**

* What current tools are you developing
* What software/tools are you currently using
* Day to day
* Position timeline
* Partnership with Intel
* Partnership with other researchers and departments at OHSU
* Intel Partnership