ABIGAIL ELIZABETH, PHD

I aim to transform how scientists employ complex information about how investigations are conducted. I am energized when I generate ideas, synthesize diverse perspectives, and navigate uncharted landscapes. My 10 years' experience across industry and academia and in quality assurance and the life sciences grounds my work in satisfying the needs of scientists. For the past four years, I prototyped the Share Science suite, a collection of tools that positions information to mutually benefit authors and the scientific community.

CONTACT



+1 864 7065956

Georgia, United States Abigail Elizabeth

in Abigail Elizabeth

SKILLS

Product development

User experience

ISO 9001

Communicate across disciplines

Generate & stimulate new ideas

App design & development

Unite customer and technical requirements

Synthesize new knowledge

Attend to detail Track the big picture

Distill complex problems

Data management, stewardship & gover-

- · Liaise with diverse stakeholders
- FAIR principles
- Standard data formats (e.g. ISA, DATS)
- Public ontologies (e.g. OBI, EFO)
- Wrangling & ETL processes
- Community standards (e.g. CIMR, MIxS)

Programming

R **JavaScript** SQL LaTex hash **Python HTML**

Operating Systems

Linux, MacOS, Windows

Software & Tools

Software & 10015	
Data management	
(e.g. GSHEETS, MySQL, JSON, BioPortal)	
Visualization	00000
(e.g. R/ggplot, D3.js, Cytoscape)	
Data handling/analysis	
(e.g. HPC, Bioconductor, SnakeMake)	

PRODUCTS

Share Science with Sheets for Google Sheets™

A. Elizabeth

2023 Google Workspace Marketplace

% App

EXPERIENCE

09/2023 - present

- Complex Carbohydrate Research Center, Postdoctoral Research Associate University of Georgia, Georgia, USA
- Enable diverse scientists to share information in the Network for Advanced
- Promote uptake of Share Science with Sheets for Google Sheets™

6 08/2019 - 08/2023

- Complex Carbohydrate Research Center, Graduate Research Assistant University of Georgia, Georgia, USA
- Prototyped and distributed Share Science with Sheets for Google Sheets™, a Google Sheets add-on that enables scientists to share the provenances of
- Promoted insight into biological experiments via R/SquareCube, an upcoming R package that drives information to mutually benefit the authors of information and the scientific community
- Established new avenues to share complex scientific information via Share Science, a conceptual framework that targets exchanging the provenance of physical material in the sciences

12/2018 12/2018

Bioinformatics Intern ♀ Novo Nordisk Foundation Center for Protein Research Copenhagen, Denmark

 Automated transforming expression data from miRNA into co-expression networks and knowledge of pathways

1 05/2018 - 08/2018

♀ Hampshire College, Massachusetts, USA **Bioinformatics Intern**

- Identified sources of unwanted variation in RNA-seg data
- Expanded awareness of missing critical metadata in public repositories

05/2017 - 08/2017

College of Charleston, South Carolina, USA

Computational Genomics Intern

 Advanced knowledge of distinction between patients with lung cancer who relapse and those who do not relapse

1 02/2016 - 08/2016

- **Quality Assurance Specialist ♀** Patheon (Astrix Technology Group), South Carolina, USA
- · Collaborated across customers and internal departments to ensure consumer safety via compliance with cGMP and FDA guidelines

1 03/2012 - 02/2016

- RI Textile, South Carolina, USA
- **Quality Assurance Assistant**
- Lead internal audits to gain ISO-9001 certification

EDUCATION

₩ 08/2023

Q University of Georgia, Georgia, USA

PhD in Bioinformatics

∰ 05/2019

Hampshire College, Massachusetts, USA BA in Bioinformatics

PREPRINTS

Reciprocal human-machine learning could transform how scientists share information

A. Elizabeth

2023

Open Science Framework

% Preprint

Software that target metadata determine if science is at sea or in a fishbowl

A. Elizabeth

₩ 2023 Open Science Framework % Preprint

Research mutualists are required to upraise research parasites

A. Elizabeth

₩ 2023 Open Science Framework % Preprint

Enable authors to share the provenance of biological material in spreadsheets

A. Elizabeth

₩ 2023 Open Science Framework % Preprint

POSTER PRESENTATIONS

Share Science with Sheets positions metadata to mutually benefit authors and the scientific community

A. Elizabeth, A. Shaver, B. Garcia, G. Gouveia, A. Edison

2023 ■ Bio-IT World Conference & Expo % Poster

Integrating spreadsheets and databases to advance capturing complex metadata with regard to metabolomics reporting guidelines

A. Elizabeth, A. Shaver, B. Garcia, G. Gouveia, A. Edison

Research in Computational Molecular Biology

Tracking material processing and regarding metadata guidelines in metabolomics with an integration of spreadsheets and databases

A. Elizabeth, A. Shaver, B. Garcia, G. Gouveia, A. Edison

NIH Common Fund Metabolomics Consortium

Entryway to adaptable, task-specific metadata management for metabolomics

A. Elizabeth, A. Shaver, B. Garcia, G. Gouveia, A. Edison

2020 Metabolomics Association of North America

AWARDS

- Coppinger Endowment Grant (Aug 2018)
- ▼ Sherman Fairchild Foundation Summer Stipend Program in the Sciences (June 2018)
- ₱ Dr. Lucy Summer Scholars Student Research Grant (May 2018)
- ₱ Denice O'Neill Award for Div II and III Research and Travel (Jan 2018 & March 2018)
- Tr. Lucy Conference Fund (Jan 2018)
- ▼ Joshua Reck Memorial Fund for Div II and III Projects (Jan 2018)
- Justine Salton Memorial Fund (Jan 2018)
- National Science Foundation BioREU Grant (Jan 2018)
- Pope Foundation for Div II and III projects (Jan 2018)
- ▼ Emerging Scientist Award (Sept 2016)