Gage Rowden, M.S.

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Education Texas Tech University. B.S. in Biology Sept 2011-May 2016 Texas Tech University, M.S. in Biotechnology Sept 2016-May 2018 **Experience** Lead Technical R&D Scientist, Priogen Corporation – St. Paul, MN Jan 2024-present • Reduced time to render user buddy lists by 75% by implementing a prediction algorithm • Integrated iChat with Spotlight Search by creating a tool to extract metadata from saved chat transcripts and provide metadata to a system-wide search database • Redesigned chat file format and implemented backward compatibility for search Researcher IV, University of Minnesota – St. Paul, MN Aug 2022-present • Designed a UI for the VS open file switcher (Ctrl-Tab) and extended it to tool windows • Created a service to provide gradient across VS and VS add-ins, optimizing its performance via caching • Built an app to compute the similarity of all methods in a codebase, reducing the time from $\mathcal{O}(n^2)$ to $\mathcal{O}(n \log n)$ • Created a test case generation tool that creates random XML docs from XML Schema Automated the extraction and processing of large datasets from legacy systems using SQL and Perl scripts **Publications** 2023 Nanoparticle-enhanced RT-QuIC (nano-QuIC) diagnostic assay for misfolded proteins Peter R Christenson, Manci Li, Gage R Rowden, Peter A Larsen, Sang-Hyun 10.1021/acs.nanolett.3c01001 Sensitive detection of chronic wasting disease prions recovered from 2022 environmentally relevant surfaces Qi Yuan, Gage R Rowden, Tiffany M Wolf, Marc D Schwabenlander, Peter A Larsen, Shannon L Bartelt-Hunt, Jason C Bartz 10.1016/j.envint.2022.107347 Elucidation of tropane alkaloid biosynthesis in Erythroxylum coca using a 2022 microbial pathway discovery platform Benjamin G Chavez, Prashanth Srinivasan, Kayla Glockzin, Neill Kim, Olga Montero Estrada, Jan Jirschitzka, Gage R Rowden, Jonathan Shao, Lyndel Meinhardt, Christina D Smolke, John C D'auria 10.1073/pnas.221537211 Comparison of chronic wasting disease detection methods and procedures: 2022 implications for free-ranging white-tailed deer (Odocoileus virginianus) surveillance and management Marc D Schwabenlander, Gage R Rowden, Manci Li, Kelsie LaSharr, Erik C Hildebrand, Suzanne Stone, Davis M Seelig, Chris S Jennelle, Louis Cornicelli, Tiffany M Wolf, Michelle Carstensen, Peter A Larsen 10.7589/JWD-D-21-00033

2021

Manci Li, Marc D Schwabenlander, *Gage R Rowden*, Jeremy M Schefers, Christopher S Jennelle, Michelle Carstensen, Davis Seelig, Peter A Larsen

RT-QuIC detection of CWD prion seeding activity in white-tailed deer muscle

tissues

Morphometric and genetic variation in 8 breeds of Ethiopian camels (Camelus 2018 dromedarius)

Yoseph W Legesse, Christopher D Dunn, Matthew R Mauldin, Nicte Ordonez-Garza, *Gage R Rowden*, Yoseph Mekasha Gebre, Mohammed Y Kurtu, Seid Mohammed Ali, Wondmagegne D Whibesilassie, Michael Ballou, Melaku Tefera, Gad Perry, Robert D Bradley 10.1093/jas/sky351

Projects

Multi-User Drawing Tool

github.com/name/repo

- Developed an electronic classroom where multiple users can simultaneously view and draw on a "chalkboard" with each person's edits synchronized
- Tools Used: C++, MFC

Synchronized Desktop Calendar

github.com/name/repo

- Developed a desktop calendar with globally shared and synchronized calendars, allowing users to schedule meetings with other users
- Tools Used: C#, .NET, SQL, XML

Custom Operating System

2002

- Built a UNIX-style OS with a scheduler, file system, text editor, and calculator
- Tools Used: C

Technologies

Languages: C++, C, Java, Objective-C, C#, SQL, JavaScript

Technologies: .NET, Microsoft SQL Server, XCode, Interface Builder