

## SKILLS

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### Server Orchestration:

- Puppet, CFEngine
- Nagios, Zabbix
- MPI, Ganglia, Condor

### User Experience:

- HTML a11y, WCAG

### Scripting:

- Arch, Red Hat, Irix
- API Integration
- Bash, Perl, Python2/3
- E-Utilities and BLAST URL APIs

### Web Technologies:

- Postgres, MariaDB, MySQL, Oracle
- Nginx, Apache
- uWSGI, PSGI
- Ruby on Rails

## SELECTED EXPERIENCE

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### Positions:

#### Department of Information Technology, UMBC

2016-present

#### Application Developer

Created Perl-based enterprise service bus and automation platform for scripting responses to system conditions across 20+ categories of application through a web interface and a multithreaded email analysis tool for processing emails from 13,000+ email accounts.

#### Department of Information Technology, UMBC

2015

#### Systems Administrator

Migrated configuration management for 20 Red Hat servers and 100+ lab machines from CFEngine to Puppet, migrated server monitoring from Nagios to Zabbix, set up Oracle and MariaDB databases for Information Systems classes including Kerberos single-sign on integration and automated account reaping based on dynamic PeopleSoft queries.

#### University of Maryland, Biotechnology Institute

2008-2013

#### Webmaster

Expanded HaloWeb from one genome to twenty plus genomes to include transcriptomic information, created Perl/R/GD data visualization tools for multi-database query building, managed cross-platform Selenium integration testing.

## SELECTED PROJECTS

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#### Student Organization Funding and Organization Tools

[apps.sga.umbc.edu/orgs](http://apps.sga.umbc.edu/orgs)

#### Student Government Association, UMBC

Created LaTeX based legislation and funding approval form tools for authenticated signatures and workflow digitization; analysis tools for financial allocation data and document analysis; and constitution/bylaw, member roster, and social profile information for student organizations.

#### Podcast, Social Media, Radio Automation Platform

[wmbc.umbc.edu](http://wmbc.umbc.edu)

#### WMBC Student Broadcasting Association, UMBC

Managed 200 DJs, created a radio management platform for recording and ingesting audio from multiple locations, a constraint based scheduling system, AutoDJ playlists and scheduled playback, recording and distribution of podcasts with limited local storage, social media and live broadcast integration, and configuration management across 4 installation locations and heterogenous OSs.

#### NCBI Genomics Hackathon

Spring 2017

Graphy McBrowserface: Graph Genomics Browser

#### HackUMBC

Fall 2014

Diffuser: Heterogenous Cloud FUSE Block Devices

## PUBLICATIONS

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- DasSarma, S.L., Capes, M.C., DasSarma, P. & DasSarma, S. 2010. HaloWeb: the haloarchaeal genomes database. *Aquatic Biosystems* 6:12.
- Capes M.D., Coker J.A., Gessler R., Grinblat-Huse V., DasSarma S.L., Jacob C.G., Kim J.M., DasSarma P. & DasSarma S. 2011. The information transfer system of halophilic archaea. *Plasmid* 65:77-101.

## EDUCATION

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University of Maryland, Baltimore County  
Bachelor of Science in Information Systems

2014-May 2018