

GREGORY DANIELSON III

SOFTWARE ENGINEER

ABOUT

Highly motivated and capable software developer, seeking a challenging and novel position to grow my experience and understanding in the field. Looking to discover new topics, discuss and solve new problems, and contribute meaningful and relevant tools to the world.

WORK EXPERIENCE

UAB Computer Forensics Research Laboratory

<https://www.uab.edu/cas/computerscience/research/research-labs/computer-forensics>

October 2018 – Present

Software Developer

Highlights

- Developed and maintained tools for capturing content from social media including Twitter, Reddit, and many other OSINT data sources
- Developed a database design methodology for storing mass social media, OSINT data from a variety of sources and in a variety of formats into different PostgreSQL databases
- Contributed to the design and implementation of a new access control system for use within the Computer Forensics Research Lab
- Contributed to the design of many supportive webapps for accessing and analyzing aforementioned captured data
- Re-designed devops methodology, webapp deploy process used by CFRL to enable developers to better test their applications locally and in CI
- Researched and deployed an Elasticsearch cluster for use with ZomboDB, allowing elasticsearch-supported full text search in the form of a PostgreSQL index
- Maintained and administered a pair of high performance CentOS servers for serving end users, mass compute, mass storage of data, running workers for aforementioned data capturing tools

University of Alabama at Birmingham

<https://www.uab.edu/cas/computerscience/>

January 2019 – May 2021

Teaching Assistant

CS330 Computer Architecture and Assembly

Highlights

- Developed and re-designed assignment structure
- Created most documents used in lab materials
- Developed consistent grading methodology
- Ensured the success of hundreds of students in deeply understanding intel x86_64 ASM

UAB Computer Forensics Research Laboratory

CONTACT



Hoover, Alabama US



(205) 410-3412



gregdan3@protonmail.com



<https://gregdan3.neocities.org/>



GitHub
gregdan3



Gitlab
gregdan3



Keybase
gregdan3



LinkedIn
gregdan3



StackOverflow
gregdan3

EDUCATION

2020
2021

University of Alabama at Birmingham

<https://www.uab.edu/>

Master

Computer Science

Grade: 4.0

Courses

- CS632 Parallel Computing
- CS636 Computer Security
- CS643 Cloud Security
- CS652 Advanced Algorithms and Applications
- CS660 Artificial Intelligence

2016
2020

University of Alabama at Birmingham

<https://www.uab.edu/>

Bachelor

Computer Science

Grade: 3.76

Courses

- CS334 Networking
- CS401 Programming Languages
- CS420 Software Engineering

<https://www.uab.edu/cas/computerscience/research/research-labs/computer-forensics>
December 2018 – March 2019

Programmer Supervisor

Harbor Freight
<https://www.harborfreight.com/>
June 2017 – September 2018

Team Member, Cashier

AWARDS

University of Alabama at Birmingham
🏆 President's List

Qualified for President's List (achieved 4.0 GPA after taking 12+ credit hours) in 3 out of 8 semesters.

University of Alabama at Birmingham
🏆 Dean's List

Qualified for Dean's's List (achieved >=3.6 GPA after taking 12+ credit hours) in 4 out of 8 semesters.

August 2016 **University of Alabama at Birmingham**
🏆 Presidential Recognition Scholarship

Highly competitive academic scholarship providing full tuition payment for UAB students qualifying via their academic accomplishments before college

PROJECTS

- ◀ **n2yo-scrapers:**
- ◀ **Cool Space Things:** A novel visualization of satellite metadata from n2yo
- ◀ **wtrr.in:** A weather service for your terminal. ``curl https://wtrr.in/``

SKILLS

Architecture

Apache Docker Elasticsearch
Flask Graylog Gunicorn Kibana
Logstash MongoDB Nginx
Phusion Passenger PostgreSQL
RabbitMQ Redis Traefik

Assembly

Intel x86_64 GNU

Backend Development

Web Scraping Design Python SQL

C/C++

Education Make

Cloud Computing

AWS DigitalOcean Ansible

Cyber Security

Database Administration

SQL MySQL PostgreSQL ZomboDB
SQLite MongoDB

Devops

Continuous Integration
Continuous Deployment Unit Testing
Git Version Control Agile

Education

Lecture Lesson Planning Organization
Tutoring

Java

JavaFX Swing

Javascript

D3 React

Networking

DNS Bind9 VPN TCP

Python

Asyncio Flask Gunicorn Numpy
Pandas Requests Scipy SpaCy

Systems Administration

Cron Bash CentOS Linux
Archlinux Debian

Vim

Development

Web Scraping

OSINT Archival Backend

REFERENCES

— Jonathan Frees

— Gary Warner

— Mahmut Unan