

NATHAN HARDEE ALLEN

OBJECTIVE Self-taught and well-rounded system administrator with experience in software development and IT seeking to apply his skills for a position in Software engineering, IT, or Cybersecurity.

OVERVIEW

SOFTWARE DEVELOPMENT

Developed 2 Django web applications for Old Dominion University's Computer Science Department.

- **Lobby Display:** Developed a visual faculty directory for ODU's computer science department. Hosted on a touchscreen display at two locations in ODU, the web app displays a provides a visual directory for ODU's CS Department. Professors' login with domain accounts via LDAP to the portal to customize their profiles.
- **Consultant Scheduler:** Designed a system for employees to input their scheduled hours. Employees enter their class hours, then choose their preferred work schedule. The system cross-checks the class schedule and ensures a minimum number of consultants are on schedule at once. Used Python 3.11 and Django backend with a SQLite3 database and a Bootstrap 5 frontend.

INFORMATION TECHNOLOGY

- Implemented an ELK Stack (Elasticsearch, Logstash, Kibana cluster) to monitor uptime of 300+ clients in 4 different computer labs. Utilized MetricBeat and HeartBeat data shippers.
- Practiced customer service using a ticketing system to troubleshoot issues.
- Administer large scale Windows and Unix Environment (1000+ clients)
- Completed learning projects in Linux/Windows servers, highly-available hosting, networking, and Django web app development.

RESEARCH

- [Is it safer at the beach? Spatial and temporal analyses...](#) Coded a Python script to periodically scrape video and save frames from a live webcam stream of a beach. The pictures and video were then analyzed using GIS software and open-source tools to measure the level of social distancing. Code: github.com/nhallen272/LivestreamDL

OTHER

Background working in diverse environments and skilled trades in bilingual settings: dock construction, carpentry, and roofing.

EDUCATION

BACHELOR OF SCIENCE IN CYBERSECURITY, OLD DOMINION UNIVERSITY, NORFOLK, 08/2021 – IN PROGRESS

GPA: 3.65; Related Studies: Unix for Programmers; Object Oriented Programming/Design; Music Recording.

ASSOCIATE OF SCIENCE: COMPUTER SCIENCE, TIDEWATER COMMUNITY COLLEGE, NORFOLK, GRADUATION MAY 2021

GPA: 4.0; Summa Cum Laude; President's Honor Role; Phi Theta Kappa; Related Studies; Calculus; Data Structures and Algorithms.

HS DIPLOMA, NEW SUMMIT ACADEMY, COSTA RICA, GRADUATED 2014 GPA: 3.75; Graduated from a study abroad program in CR, where I lived for a year, learned Spanish and culture.

WORK HISTORY

CONSULTANT, OLD DOMINION UNIVERSITY COMPUTER SCIENCE SYSTEMS GROUP, NORFOLK, VA

October 2021 – Present. Resolved IT tickets from students, faculty, and staff in the CS department. Developed custom applications and scripts including a faculty directory display and an internal scheduling system. Completed learning projects in Linux and Windows system administration, Active Directory Domains, web hosting and monitoring, and containerization with Docker.

DECKHAND, A & B MARINE, PORTSMOUTH, VA

June 2020 – 2022. Constructed docks and decks on a piledriver. Operated hydraulic equipment and power tools.

ROOFING INSTALLER, ALVAREZ ROOFING, NORFOLK, VA

March 2015 – Aug. 2018. Maintenance staff on TCC's Norfolk campus. Responded to work order tickets involving construction, plumbing, and basic electrical upkeep.

FACILITIES TECHNICIAN I, TIDEWATER COMMUNITY COLLEGE, NORFOLK, VA

March 2017 – Sept. 2017. Maintenance staff on TCC's Norfolk campus. Responded to work order tickets involving construction, plumbing, and basic electrical upkeep.

FACILITIES MAINTENANCE, NAVAL STATION NORFOLK, VA

April 2016 – Sept. 2016. Secret clearance temp job on Naval Station Norfolk. Assisted in the construction of new office spaces including carpentry, drywall, computer setup, painting and drywall repair. Assisted IT staff in routing of ethernet cabling and electrical conduit.

SKILLS

Linux environments (Ubuntu Server, Debian): Knowledgeable in *nix CLIs, package management, building from source, IPTables firewall, NFS, crontab, bash scripting, web servers, SSH Keys/SSL Encryption, and basic regular expressions.

Databases: MySQL, SQLite.

DevOps: Docker containers, and GitLab CI/CD Pipelines

Windows/Windows Server 2016-2019: Experience in administering a Domain Controller, Active Directory, DNS, DHCP, and PowerShell. Package management with Chocolatey. Experience adding LDAP login capability to web apps

Programming Languages: Advanced Python 3 and C++. Experience with HTML, Jinja2 Templates, and ORMs. Basic experience with SQL, JavaScript.

Automation: Experience in orchestration and automating tasks using Ansible. Deployment of websites using CI/CD pipelines and shell scripts over SSH.

Virtualization: Experience with oVirt engine, VirtualBox, and VMWare.

Research: Experience in web scraping and formatting/filtering data using Python.

Networking: Basic knowledge of IP addressing, OSI, TCP/IP models, and networking CLI programs.

Monitoring:

- ELK Stacks: Elasticsearch, Logstash, Kibana:
- Data Shippers: MQTT protocol, Heartbeat, Metricbeat, Filebeat,
- Thingsboard IoT Dashboard

Version Control: GitLab and GitHub.

IDE/Text Editors: Experience in Visual Studio & VS Code.

REFERENCES

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