

# Phillip Ostby

contact@phillipostby.com | <https://phillipostby.com>

## Skills and Interests

ACLs, AES, ARP, Bash, C, CDP, Cisco, C++, Cryptography, CSS, Cybersecurity, Databases, Debian, Desktops, DHCP, DMZs, DNS, DSL, DTP, EIGRP, Encryption, EtherChannel, Ethernet, FHRP, Firewalls, Fortran, FTP, Gateways, Git, GLBP, Hardware, HSRP, HTML, HTTP, Hypervisors, IAM I, IAT II, ICMP, IOS, IPv4, IPv6, Java, JSON, LACP, LANs, Linux, LLDP, LUA, MacOS, Multicast, MySQL, NAT, Networking, NTP, OpenWRT, OSI, OSPF, PAgP, PHP, PKI, PoE, Printers, PVST, QoS, Registry, RIP, Routers, RSTP, Scripting, Security, Servers, SLAAC, SNMP, Software, SQL, SSH, SSL, STP, Subnetting, SUSE, Switches, Syslog, TCP, TCP/IP, TLS, UDP, Virtualization, VLANs, VMWare, VRRP, VTP, WANs, Wi-Fi, Windows, Wireless, Wireshark, WLANs, Workstations, XML, Zendesk.

## Certifications

**Cisco:** CCNA (In Progress).

**CompTIA:** A+, Network+, Security+.

## Education

### UNIVERSITY OF NORTH GEORGIA

B.S. Summa Cum Laude in Computer Science. GPA 4.0.

Minored in Mathematics, Concentrated in Information Assurance and Security.

Marion C. Wicht Computer Science Award for 2012 and 2013.

Dahlonega, GA

May 2013

## Experience

### RATERLABS (APPEN SUBSIDIARY)

#### Senior Internet Analyst

Remote

May 2014 - Present

Collaborates with one of the world's largest search engine companies to analyze and improve mission critical services. Supports machine learning and data analysis efforts through quality assurance practices. Monitors emerging trends through critical thinking to proactively target the root causes of negative end-user experiences. Communicates and collaborates with coworkers and management teams to ensure quality of deliverables. Advises new employees of corporate procedure, feedback, and performance improvements. Maintains productivity above 100% in a fast paced metric driven environment while consistently exceeding quality audits at or above a 90% average. Identifies and escalates IT related issues such as platform performance, bottlenecks, JavaScript/JSON, and misconfiguration through ZenDesk ticketing systems.

### BLACKBERRY MOUNTAIN/RIVER'S EDGE ASSOCIATION

#### Assistant Office Manager

Ellijay, GA

June 2016 - July 2016

Performed independent customer service and issue resolution for two communities of 200+ full time homeowners. Utilized triage skills to resolve higher priority tasks without blocking lower tier queues through phone and in person support. Coordinated with homeowners, contractors, and stakeholders to dispatch repairs to association infrastructure. Implemented disaster recovery by troubleshooting desktop and network hardware with emphasis on DNS/DHCP, Wi-Fi, switching, routing, ethernet cabling, DSL, and Layers 1-3.

### UNIVERSITY OF NORTH GEORGIA

#### Mathematics and Computer Science Tutor

Dahlonega, GA

September 2012 - May 2013

Clarified undergraduate and occasional graduate level topics for an average of 5 to 10 students a shift. Investigated root cause of systematic misunderstandings which often led to 20 to 30 percent point increases on assignments. Collaborated with students and other tutors with strong interpersonal skills to conceptualize plans of remediation. Debugged and developed solutions in C, C++, Java, JavaScript, SQL, HTML/CSS, XML, Bash, MATLAB, Maple, and LaTeX. Coached students in a diverse range of mathematical topics ranging from Algebra to Calculus II, including Discrete Mathematics, Graph Theory, and Numerical Analysis.

### OAK RIDGE NATIONAL LABORATORY

#### Intern Software Engineer

Oak Ridge, TN

May 2011 - August 2011

Coordinated and engaged with a team under the Department of Energy's FaST program. Researched and developed C, C++, FORTRAN, and CUDA based solutions for accelerating Adaptive Mesh Refinement/AMR routines. Focused on GPGPU acceleration of iterative linear solvers such as Jacobi and Gauss-Seidel. Considered cache structure, thread/warp/blocks, and bandwidth of VRAM/PCI-Express links. Refactored, optimized, baselined, visualized code performance, and created documentation using tools like vi, Doxygen, Mercurial, and VisIT. Demonstrated a runtime code speedup of 10 to 20 percent dependent on the dataset.

**GILMER MIDDLE SCHOOL**  
**Information Technology Specialist**

Ellijay, GA  
May 2008 - Jul 2008

Assisted teachers with the integration of information technology for Computer Based Training. Managed the assignment, communication, and inventory of clicker interface devices. Diagnosed and debugged issues with Layer 1 of the clicker network infrastructure. Parsed logs of student participation through a Windows based database frontend. Effectively collaborated with teachers and management staff to educate 50 to 100 students daily.

**Projects**

**Optimization and Deployment of Windows 7 Embedded Standard Images**      October 2013 - April 2020

Used a combination of the Image Configuration Editor (ICE), autorun XML, scripts, and DISM to functionally optimize Windows 7 Embedded Standard to install on 1-2GB of hard drive space. Integrated relevant drivers and hotfixes for xHCI and NVMe support, and care was taken to create bootable install .iso images for x86 UEFI and BIOS configurations. Optimized image was used a variety of configurations, including workstations, clients, and servers.

**3D Demonstration Program for Windows Using OpenGL/GLUT**      January 2013 - May 2013

Developed a simple demonstration program using OpenGL/GLUT for my senior project at UNG. Used concepts of linear algebra, quaternions, trigonometry, and discrete math to program OpenGL calls for primitives, mipmaps, textures, camera/object orientation, and user input. Implemented programmable fragment shaders using GL\_FRAGMENT\_SHADER to texture scenery elements, create translucent water, and map raster data onto objects.

**Lightweight PHP Based Web Portal and Account Creation CMS**      January 2012 - May 2012

Created a PHP based CMS to allow users to safely register accounts and view news posts for various services such as game servers, forums, and ticketing systems from a centralized location. Implemented conditionals and regular expressions to validate user input from a server side perspective in an attempt to protect against SQL injection and spam. Used a MySQL based backend to index user data, with passwords stored using SHA256/salted hashes, or AES symmetric key ciphers depending on the service.

**Server Administrator and Community Lead Consultant**      June 2007 - May 2012

Led and administrated several successful game server communities of 20-30 people in 2007, 2008, 2010, and 2012 focusing on World of Warcraft. Used communication tools such as email, web based ticketing systems, and teleconferencing through Ventrilo to coordinate outreach and organization of members and events. Had numerous practical opportunities for debugging Apache, Nginx, PHP, MySQL, Visual Studio, network performance, NAT forwarding, C/C++ based plugins, LUA, Antrix/TrinityCore, batch/shell scripts, Windows Server 2003, and Debian.

**Java Emulation of WoW Login and Freelancer GUN Matchmaking Servers**      March 2010 - May 2010

Partially reimplemented the matchmaking process of the UDP DirectPlay based Microsoft Freelancer, and TCP login process for World of Warcraft in Java. Used Wireshark to capture datagrams/segments to reverse engineer OSI layers 5-7, and reimplemented handshake mechanisms and server population opcodes for functional selection on clients. Tested static arrays and dynamic data structures such as linked lists for data storage, Java Sockets API for TCP/UDP communication, threading, and timers for expiring servers and saving backups.