

Soumik Ghosh

9900H Hunters Mill Road
Blacksburg, VA 24060
(540) 267-4858
soumik@soumikghosh.com
http://soumikghosh.com

- TECHNICAL SKILLS** Languages: PHP, Bash, C, Java, PERL, HTML/CSS and Javascript
Platforms: LAMP (Linux, Apache, MySQL, PHP) and LEMP (Linux, Nginx, MySQL, PHP)
Databases: MySQL, MariaDB
Operating Systems: Microsoft Windows, Debian, Ubuntu, and variants
- PROJECT SKILLS** Management of web servers like Apache, Nginx, Lighttpd, etc
Optimising front facing software stacks like LAMP or LAMP for sustaining high traffic or load
Planning, organisation and set up of infrastructure for highly-available web applications
Sustaining high-concurrency by using caching tools like Varnish/opcode cache and database duplication
Unix server administration
Implementation of email authentication protocols like SPF, DKIM and DMARC
Configuration and management of DNS servers like BIND, NSD
Management of email servers like Exim and Postfix
- EXPERIENCE**
Independent Consultant
Eduweb, Inc.
June 2012 – Present
- Management of a high-traffic phpBB community forum - the Wolfquest forums. Having more than 2 million posts and hundreds of concurrent users, the forum was bogging down the server. Server stack optimisation included optimising Apache configuration, setting up Nginx as a front-end reverse proxy, implementing a PHP opcode cache (XCache, later changed to APC), optimising the MySQL server configuration, including changing busy tables to use the InnoDB engine and replacing the native search backend with a custom coded search backend using the Sphinx search engine.
- Other duties included management of a backed up Qmail mail server. Tasks included indentifying bounce-back emails from a mass-email announce list, and writing scripts/cronjobs to automatically delete bounceback emails to prevent to mail server from getting backed up.
- Also responsible for tweaks to the UI using HTML/CSS, including creation of a mobile theme and implementation of a mobile browser detection script written in JS.
- Independent Consultant**
Goonersworld
October 2010 – Present
- Hosting and management of a site with massive amounts of intermittent traffic. The site in question was getting thousands of concurrent users during football matches and none of the popular hosting providers were able to host it. Performed a quick migraton of the web site to my server and implemented a software stack to handle the large number of concurrent users. Nginx was used as the primary web server with PHP-FPM with opcode cache for processing the server side logic. A php-fastcgi caching mechanism was implemented for guests, in order to deal with the lock-contention caused due to a high number of concurrent users.
- Other tasks included optimisation of the MariaDB database server and master-slave database duplication, and software stack optimisation similar to the Wolfquest forum.
- Web hosting specialist**
Various clients
May 2008 – Present
- Hosting high-traffic websites and management of web servers running on Debian/Ubuntu/CentOS. Typical tasks include optimisation and maintenance of the software stack, security audit, management of DNS and mail servers including email authentication protocols, implementation of file and database backups using rsync/duplicity.
- Other miscellaneous tasks include writing Bash/Shell/PERL scripts for various purposes - created a PERL script that generated downloadable archives for images in a gallery, caching the most recently requested archives.

REFERENCES AVAILABLE UPON REQUEST