Nick Gully

nick@gully.org || gully.org/nick || 303.319.9760

Looking to contribute experience in software, hardware integration, laboratory testing, and good humor to development and shipping exciting products improving the global environment. Adept at issues that are difficult, involve coordination, legacy code, customer outreach, or education materials to make a successful product.

Staff Software Engineer, Ad Platform : Magnite March 2020 - Present

- Delivering high performance software across multiple components in data centers. (C++20, python)
- Mentoring new hires and improving documentation to streamline onboarding. (Confluence)
- Upholding high software quality through well written stories, automated tests and code reviews. (Jira, Python, GitHub)
- Applying new technologies to deliver next-generation performance goals. (seastar.io)
- Designing systems to span on-prem hosting as well as cloud-burstable instances. (docker, k8s)
- Providing training for distributed knowledge of key products and technologies. (slides, Google Meet, hand puppets)
- Working in an intercontinental team from home and office. (Slack, Hangouts)

Software Engineer 3, Extensibility & Core : Trimble SketchUp 2017 - March 2020

- Producing cross-platform features in C++ for use on multiple platforms. (vim, Xcode, Visual Studio, git, perforce, Atlassian agile suite)
- Volunteered to take on a major feature upgrade and refactor that was a year overdue; turned it around to release in three months.
- Developer outreach and conference presentations on new features.
- Support for internal and external developers. (C++, C, Ruby)
- Concept and working prototype of SketchUp using cloud-based parametric geometry engines. (nanomsg, WebSockets, TypeScript, Vue.js)
- Three years as volunteer facilitator for productive annual hackathons.

Software Engineer 2, 3D Warehouse : Trimble SketchUp 2015 - 2017

- Built components of browser-based SketchUp and cloud file access module (TypeScript).
- Developing robust websites for SketchUp users across the globe on a two week agile release cycle (JavaScript, TypeScript).
- Using analytics feedback to improve user interfaces and performance (Google Analytics)
- Implementing search pages to provide responsive interfaces that are cacheable on CDN's as well as palatable to search engines to improve page rankings. (Cloudfront, Node.js)
- Recovery and palliative care for legacy website involved in software purchases and downloads for in-application extensions. (php, ibuprofen)

Manager and Software Engineer, Browser Toolbars : ShopAtHome 2013-2015

- Managed a team of five programmers and enabled communication between groups.
- Refactored IE Toolbar C++ code and installer to remove need for UAC elevation; cut installer size by a third. Resulted in millions in additional revenue from customer success.
- Toolbar applications in C++ (IE) and Javascript (Chrome, Firefox, Safari).
- Using Unit and Integration tests to validate business logic in browser extensions and supporting backend web servers. (Visual Studio, TFS)
- Application services, unit tests, and SQL procedures for backend servers handling millions of requests every day from active Toolbars. (C#, MSSQL)

Lighting Engineer and Programmer : ITL Boulder 2004-2013

- Design, development, and support of a Win32 multithreaded C++ applications for operation of photometric instruments (goniophotometers and spectroradiometers), including hardware integration of moving test apparatus with human safety lockouts.
- Maintaining a world-class reputation and NIST NVLAP Certification for accurate reporting, became one of two laboratories chosen for validation of DOE L-Prize contestants. Testing for prototypes, manufacturing quality control, and research.
- Training, management, safety, and scheduling for technicians and a programmer in a laboratory growing at 30% a year for over four years.
- Software development in C++ for an AutoCAD plugin tool for lighting calculations and rendering of architectural and roadway environments.

Software Engineer : Lighting Analysts, Inc. 2000-2004

- Development of software for accurate lighting calculations and visualizations of interior and exterior lighting design. User interface, direct and indirect lighting calculations for architectural environments and photometric data, network licensing code. (C++, VB)
- Design, maintenance, and security of a web server for installer downloads. Reduced the installer size in half to facilitate moving from CD to internet distribution of software. Secure customer login for access to downloads. (Linux, Apache, MySQL, Perl)

Education: University of Colorado - Boulder 1999

- Architectural Engineering with Illumination Engineering emphasis.
- Minor in Computer Science, emphasis on numerical algorithms.

Etcetera

- Home repair, cycling, hiking, model railroading, running my own server for web/mail.
- CppCon Staff Organizer for exciting field trips, 2021-2024.