

ANTHONY GAROT

3714 N HIGHWAY 28 TRLR 13, LAS CRUCES, NM 88005-4324

Direct: 928-351-1170

<https://www.garot.com/anthony/>

Email: tone.garot@gmail.com

SUMMARY

Experienced and educated **Software Architect, Lead Programmer & Project Manager**. Embedded systems, full-stack, and cloud software development using Agile methodologies and software best practices. Self-directed, clear communicator, results oriented, and generative thinker.

TOOLBOX (ABRIDGED)

Languages	Python, Java, c++, BASH, PHP
Frameworks	Django/Python, CodeIgniter/PHP
Front-end	JavaScript, TypeScript, ReactJS, CSS
Testing	UNITTEST for Python & Django, Junit, CppUnit, PHPUnit, jest-cucumber & Gherkin
Platforms	Linux (Mostly Debian & other Ubuntu flavors), MacOS, MS Windows
DevOps	AWS Cloud, VirtualBox, Vagrant, Linux, CLI
Micro Services	Docker, Kubernetes
Databases	MySQL & PostgreSQL on RDS, SQLite3, WhiteDB, many others RDBMS & NoSQL systems
Networking	REST, web sockets, MQTT, BACnet/IP, SSL/TLS
Tools	Git/GitHub, PyCharm & PhpStorm, VIM, pylint
Productivity	Jira, Confluence, BaseCamp 3, Gantt Chart
Mobile	Cordova (for Android & iOS)
Misc	English proofreading, Photography, Adobe Lightroom & Photoshop, GIMP, Inkscape

PROFESSIONAL EXPERIENCE

BioLife Solutions, Inc. — Software Developer — Bothel, WA (2021-Current)

- Workflows for armhf (BeagleBone Black) development & deployment
 - Documented workflows for Debian Stretch & Buster “flasher images” to the eMMC.
 - Set up cross compiling for Qt5 applications on Ubuntu X86_64 to armhf/Debian Stretch ImgTec by encapsulating all device headers and libraries into a sidecar .iso file.
 - Implemented automated upgrades using Debian (.deb) packages via apt (from cloud and/or USB stick).
 - Implemented Inter-Process Communication via UDP for single producer, multiple consumers in python.
 - Created Device Tree Overlay for custom hardware controller board.
 - Compiled custom Linux kernel and modules.
 - Implemented SSH forced-command for generating secure database exports via rsync.
 - Set up and configured wpa_supplicant solution for WiFi.
- Assumed responsibility for Java embedded system (BACnet/IP, MQTT/Losant).
 - Rewrote BACnet/IP and MQTT protocols in Python3 for Next Gen system

- Added REST output protocol w/ Fernet encryption and UDP producer functionality.
- Created stress-tester tools and test suites.
- Assumed software responsibility for cloud-based VersAlert monitoring system of temp/voltage/current etc.
 - Revised website and user experience.
 - Added TLSv1.3 to existing Java “collector” limited by specific cipher suites.

Foreign Exchange Trader — Phoenix, AZ (2018-2021)

- Created automated trading Expert Advisors and Indicators for MetaTrader 5

Aural Analytics, L.L.C. — Program Manager / Mobile Developer — Scottsdale, AZ (2017-2018)

- Created documentation and practices for Engineering Department and Operations Department.
- Assembled App for Android and iOS using Cordova.
- Wrote documentation to fulfill FDA requirements for CFR Title 21 Part 11 for a clinical application.
- Ran weekly staff meetings.
- Set up EC2 for collecting data from clinical iPads and home mobile devices.
- Met launch date for Cytokinetics clinical trials.
- Instructed clinicians of how product worked in Chicago.

Bat Conservation International — Membership Manager / Web Developer — Austin, TX (2015 to June 2016)

BCI is a nonprofit organization specializing in the conservation of bats and their habitats.

- **Membership Manager** role entailed managing 14 contribution programs that raised 1.7M per year in unrestricted funds. I supervised two people, set up and maintained the schedule, refined and documented every process, database administration in Raiser's Edge (RE7) & Spark/NetCommunity, and created the FY17 budget.
- **Web Developer** role entailed various software maintenance projects in Joomla, PHP, JavaScript, payment gateways, etc.

Whimbrel, L.L.C. — Architect, Lead Programmer — Austin, TX (2014 to 2015)

Whimbrel, L.L.C. was a start-up company specializing in digital asset management solutions. Role entailed many "hats."

- **Strategist:** Worked closely with executive management to define a desktop software product; frequent review with executive management of product, target market, pricing model, company direction, etc.
- **Project Manager:** Selected system for tracking product requirements; documented and sized user stories; assembled weekly metrics; reviewed weekly user story requirements, priorities, and scope with executive management. Reviewed completed user stories for completeness and usability.
- **Team Lead:** Interviewed, hired, and managed a team of software developers; led daily standup; removed impediments.
- **Architect:** Researched, selected, and documented toolset, libraries, and solution architecture for desktop software product. (wxWidgets, OpenCV, libjpeg-turbo, MinGW/MSYS) Ongoing technology integration research.
- **Programmer:** Created initial framework and prototype for c++ desktop application; ongoing feature development.

Garot Software Services — Independent Software Consultant — (1997 to present)

Experience providing complete, scalable, and sustainable software solutions for diverse clients/requirements including, but not limited to:

- Created and presented marketing prototype to potential investors of a Las Vegas startup company.
- Designed and implemented Intranet infrastructure for a Las Vegas startup company including networking, secure 64bit RAID1 “backup” server and subversion version control server.
- Migrated six separate Joomla domains & legacy systems to new web hosting provider. Migration was both seamless to end users and met required deadline.
- Devised methodology to detect and discover hacking artifacts on client web servers. **Result:** the total removal of undetected legacy vulnerabilities.
- Proposed and implemented, *Take Action!*, an online system to connect concerned citizens with their specific government representatives for critical conservation campaigns.
- Created e-commerce payment gateway library (Authorize.Net and PayPal) used by multiple applications. **Result:** minimal coding to add payment functionality for donations, membership, subscriptions, events, or simple product sales.
- Designed the "Decision Matrix Tool" for the *Abandoned Mine Closure Website* used by both public lands and private land owners to clarify mine closure scenarios, educate, and promote bat conservation.
- Revised article, “Bat Photography,” originally written by world renown bat photographer Merlin Tuttle, to include recent trends in digital photography equipment.

Boys Town National Research Hospital — Research Computing Engineer — Omaha, NE (2004 to 2005)

- Mentored summer intern and monitored ASIO under Linux project.
- Developed the Auditory Research Sound Card (ARSC) ANSI C library used for synchronous auditory research projects. Library included ASIO protocol. **Result:** removed operating system induced latency issues resulting in synchronous operation.

Boole & Babbage, Inc. (now BMC Software, Inc.) — Product Support & Tasks Engineer — San Jose, CA (1995 to 1996)

- **Level 3—Special Products Developer** for software development of “Ensign NetWare & NT agents.”
- Won the first ever “Star of the Quarter Award” excellence award.
- 8% salary increase after one year.

Greenbrier & Russel, Inc. (now Fujitsu America) — Software Developer — Brookfield, WI (1993 to 1995)

- Developed and coordinated a core set of PowerBuilder framework objects—the backbone for nine application developers within two separate Wisconsin state agencies. Framework was used to create front-end client/server applications to achieve the state's compulsory goal to eliminate an IBM mainframe within 1.5 years.
- Moderated the PowerBuilder Standards Committee for the State of Wisconsin Dept. of Public Instruction (DPI).
- 3% salary increase after six months.

E.D.S. (now HP Enterprise Services) — Novell and LAN Administrator — Warren, MI (1992 to 1993)

- **Novell Supervisor** for two NetWare 3.11 file servers hosting over 600 clients as well as three SAA Gateways for AS/400 connectivity.

EDUCATION

- **MS**, Electrical Engineering, University of Wisconsin, Madison, 1992
- **BS**, Electrical Engineering, University of Wisconsin, Madison, 1990