Mike Carifio

Summary

- Have led and managed software development teams large and small, local and remote.
- Have delivered profitable software products and services by writing code, tests, requirements, specifications and documentation.
- Have created cloud infrastructure on public clouds in support of these services and automated the process where needed.
- Have engaged customers, senior leaders and especially investors by explaining complicated concepts in approachable ways.
- Have led efforts of all sizes in companies of all shapes using agile, lean and seat-of-the-pants techniques.
- Skilled in Internet technologies and service oriented architectures using various software stacks and interprocess communication protocols. I can breath life into new ideas without breaking the bank.

Resume current as of 02/2024. Contact information below. Alternative formats: pdf and docx.

Experience

- Linux Engineer, CIQ, The Internet (08/2021 – 09/2023)

  - Provided technical support for RockyLinux and CIQ's product set on-call and via electronic forums.
  - Implemented infrastructure and development projects as needed and as assigned on the Azure, Google and Oracle clouds and at Vultr.
  - Wrote articles and blog posts describing interesting or important Rocky Linux and CIQ technology.
  - Installed CIQ products "on premise", sometimes adapting the product set and/or customer infrastructure to match product requirements and their needs.
  - Technologies: bash, python, golang, pulumi, kubernettes, podman/docker, linux containers, git, github, gitlab, jira, scrum, rhetoric.

- Owner, Moonlit Systems, The Internet (05/2015 – present) Technologist specializing in software development, including cloud-native applications.

  Roles included:

  - Lead Developer (08/2019 – 08/2021) for The Crescendo Consulting

Group, a consulting practice specializing in Healthcare IT.

  - Wrote an .Net service in C# to compute patient acuity scores based on patient symptoms from well known mental health questionaires.
  - Led all phases of project, from discovery to design, to implementation, to deployment, to testing, to support and to presentations to various stakeholders.
  - Project assets were purchased by a third party to seed a venture capital backed startup. I coached the developers on the transition team.
  - Technologies: C#, .Net Core including ASP.Net, Azure, VPN, HL7V2, FHIR.

- VP of Engineering (05/15 – 08/2020) for Encirca, a domain name registrar.
  - Architected a revamped product suite, wrote project proposals, recruited and managed a remote team of eight.
  - Ran daily standup and a modified SCRUM process.
  - Selected tools and technologies, transitioned legacy products from co-located servers to Amazon Web Services.
  - Technologies: java, javascript, nodejs, keystone, mongodb, git, aws, jira, bash, scrum

- Investigator (07/2015 – 09/2016) for ASM Research, a DoD contractor, to leverage technologies to modernize the Veteran Administration's healthcare IT infrastructure.
  - Wrote nodejs modules, documentation, test suites for a FHIR extract-transform-load library.
  - Technologies: javascript, nodejs, noflo, RDF, jsonld, git, mongodb, aws, vpn, bash.

- Python Developer, Pazien (now Worldpay), Newton MA (06/14 – 05/15)

  - Wrote python3 plumbing to drive a reporting website for the credit card industry.
  - Helped plan sprints, ran the daily standup, coached peers, investigated technology where needed.
  - Technologies: python3, git, pycharm, ansible, aws, mongodb, pymongo, SQLAlchemy, sql, scrum.

- Senior Software Engineer, Amadeus North America, Waltham MA (11/13 – 06/14) Distributed Systems Messaging Broker

  - Wrote C++11 for a highly distributed message passing system for the airline industry using the Suse Linux stack.
  - Wrote zsh and python scripts to automate all phases of development and deployment.
  - Coached junior developers. Recommended new tools.
  - Technologies: C++11, zsh, python3, mercurial, eclipse.

- Entrepreneur (03/13 – 11/13) Investigated ideas.

  - Investigated new technologies (machine learning, OpenStack) and emerging programming languages (scala, clojure, go and dart)

seeking fit to emerging markets.
- Investigated the "makerspace" movement (FreeCAD, 3d printing).
- Designed a portable take on the classic woodworking workbench. Crafted prototypes in wood and PVC.
- Learned Octave, an open source alternative to matlab.
- Explored lean startup concepts.
- Technologies: python3, openstack, scala, clojure, go, dart, FreeCAD, html5, css3, 3d printing, git, carpentry.

- Software Engineer, Premium Engagements Team, Canonical USA, Lexington MA (02/10 – 03/13)

  - Wrote a Windows 7/.Net 4.0 control panel to dual boot Windows and Ubuntu on Dell laptops (part of the Ubuntu Light project).
  - Adapted Ubuntu for thin client hardware using the Remote Desktop Protocol.
  - Adapted Ubuntu to run on Android phones as an alternative desktop manager.
  - Adapted Ubuntu to run in cars as the infotainment console. Wrote code in C/C++ and Python3 (command line and gtk apps).
  - Packaged open source software using apt. Extended the apt mechanism in C++, Python2/3 and bash for specific client needs.
  - Technologies: Python3, nose, C/C++, bash, .Net WPF, .Net Services, C#, docbook, pycharm, apt, bzr, deb, RDP.

#ifdef full * Principal Software Engineer, VIStology, Framingham MA (05/09 –1/10)

- Investigated policy based security mechanisms for the US government's Missile Defense Agency.
- Analyzed existing systems: Kerberos, Rein and OpenVPN. Wrote prototypes to demonstrate concepts in Java, PHP, Javascript and Python.
- Investigated wikis as a knowledge capture tool for US Army Intelligence. Leveraged logic-based knowledge representation technologies such as RDF and OWL2.
- Managed servers and network infrastructure in addition to developing software.
- Technologies: python2, java, eclipse, mysql, bash, php, javascript. RDF, OWL2, OpenVPN.

- Principal Software Engineer, Wandrian, (now SilverRail Tech), Newton MA (04/08 – 05/09).

  - Integrated travel related backend services (ticketing, scheduling) to Wandrian's travel hub. Wrote a Java webservice interface to Amtrak's ticketing and scheduling system based on the Open Travel Alliance specification.
  - Deployed revisions of the service on a periodic basis (devops before the term existed). Automated deployment in bash and perl.
  - Wrote QA and unit tests using SOAPui.
  - Technologies: Java 5/6, maven, spring, intellij idea, SQL Services,

mysql, hybernate, junit, xml, sax, wsdl, Apache CXF, bash, perl, SOAPui.

- Owner, Understanding Systems, Inc (08/1997 – 04/2008) Technologist specializing in internet applications.

  Roles included:

  - Vivox (now Unity)
    - Automated their SDK testing with swig and perl5.
    - Technologies: perl5, C++98, swig.
  - Demandware (now Salesforce)
    - Wrote server-side Java (J2EE) for an e-commerce suite, including domain objects to search for stores by postal code (zipcode in the US).
    - Integrated the Apache Rhino javascript engine to Demandware's server for server-side javascript execution.
    - Technologies: Java 5, javascript, eclipse, junit
  - Peppercoin (now Heartland Payment Systems)
    - Integrated American Express's ISO 8583 based payment protocol webservice into Peppercoin's micropayment system.
    - Wrote "batching logic" to aggregate micro payments into larger credit card payments and monitoring tools to test TCP/IP connections to AMEX in production.
    - Technologies: java, eclipse
  - bcgi (now XIUS)
    - Wrote a reporting system in perl to reconcile phone bills.
    - Implemented a cell phone provisioning service in perl.
    - Specified, architected, designed and then lead a team of approximately fifteen developers across two companies and two continents (with groups based in Westbrook, Maine; Montreal, Canada and in Hyderabad, India) to build bcgi's next generation cell phone e-commerce system (3 year engagement).
    - Technologies: perl, bash, SQL Services, java, tomcat, java EJB, ASP.Net.
  - LBO Enterprises
    - Helped found the sports marketing and loyalty company Sports Loyalty Systems.
    - Bootstrapped the company's initial infrastructure: email, website, networking and development environment.
    - Introduced founding team to IDG Ventures (now Flybridge), who lead a $5M USD series A round in late 2005.
    - Technologies: Adobe CS2, Powerpoint.
  - Sandia National Labs
    - Implemented a test suite for a massively parallel Linux clusters based on the MPI, the Message Passing Interface (2 year engagement).
    - Technologies: C98, MPI, bash, perl5.
  - Thompson and Thompson
    - Filled various technical roles in a T&T spinout Namestake, a Internet brand monitoring service.

- - Led a project team exceeding 20 people.
    - Technologies: Java 4, Java Servlets, Oracle.
  - CIO Communications
    - Part of CIO's web operations
    - Wrote a monthly technology article Power Source
    - Helped launch Darwin magazine's website https://www.darwinmagazine.com/ (now defunct).
    - Technologies: Linux and Windows system management, ColdFusion, ASP, rhetoric.

- Board Member, Information Technology Board, Maine Technology Institute (02/02 – 02/05).

  - Volunteer reviewer of seed, development and cluster funding proposals in Maine's software development and information technology community.
  - Technologies: business acumen, common sense.

- Engineering Manager, Architect, Open Market Inc, Cambridge MA. (02/95 – 08/97)

  - Lead an engineering team of approximately ten software engineers developing software products for e-commerce and the web.
  - Led all phases of development for five "version 1" products, including design, implementation, test, task assignment, scheduling, project tracking, team building and coaching. Wrote code.
  - Designed and managed the work team's initial Windows infrastructure, including procuring machines, researching and installing software and connecting to the existing network. Products shipped on leading UNIX and Windows platforms.
  - Technologies: ksh, C, tcl.

- Technical Director, Web Services Group, Digital Equipment Corporation (now Hewlett-Packard, Inc) (04/92 – 02/95)

  - Architect for an enterprise-wide financial reporting system based on Internet tools, protocols and standards.
  - Led a design and implementation team of approximately twenty.
  - Established implementation policies and practices (code and configuration management, test coverage and so forth) and monitored progress.
  - Selected key technologies. Advised senior management on technical options.
  - Technologies: C++98, VMS DCL, SQL.

- Software Engineering Supervisor, Digital Equipment Co. (now Hewlett-Packard, Inc) (07/81 – 04/92)

  - Recruited, trained and managed a team of seven engineers and researchers.
  - Championed research proposals inside Digital Services, identified business opportunities and funding sources.

- - Completed four research projects in:
    - model-based diagnosis of computer networks
    - knowledge-based software configuration management
    - agent-based security monitoring and
    - natural language machine translation.
  - Research was incorporated into two Digital products and two internal tools.
  - Awarded US and European patents for the networking research.

#else A longer employment history spanning over four decades is available. The history above covers the most recent decade. #endif

Education

- Master of Science, Computer Science, Boston University, Boston MA, 1986.
- Bachelor of Science, Mathematics, Boston College, Chestnut Hill, MA, 1980.

Publications

- *Building Knowledge-based Operating System Consultants*, Meyer Billmers and Michael G. Carifio, Proceedings of the Second International Conference on Artificial Intelligence, 1985.
- *TWS: A Workstation Environment for Machine-Assisted Natural Language Translation*, Michael G. Carifio, Arthur McCaffrey, Peter Anick, Lynn Staub, AIAGTR 12-88, 1988.
- *The Translator's Workstation Technical Description*, Michael G. Carifio, Lynn Staub and Peter Anick, AIAGTR 6-89, 1989.
- *Why Get Hyper about Hypertext?*, Michael G. Carifio, AAAI89 Workshop on AI and Hypertext, 1989.
- AI Research and Applications in Digital's Service Organization, Anil Rewari, Mark Adler, Peter Anick, Meyer Billmers, Michael Carifio, Alan Gunderson, Neil Pundit and Mark Swartwout, AI Magazine, Winter 1992 (Vol. 13, No. 4).
- US Patent 5,428,619, A Model-based Reasoning System for Network Fault Diagnosis.

/dev/random

- I taught Computer Science and LISP Programing on an adjunct basis at Boston University for several years. Teaching is one of the best ways to learn something thoroughly.
- I've used emacs longer than most of my colleagues have been alive.
- I have a sense of humor (this isn't an example).
- But not about emacs (this is an example).

Contact

- mike-carifio.contact.yaml is my contact information in yaml
- mike-carifio.contact.yaml.vcf is my contact information in virtual card format, a vcard.