

**WEB DEVELOPER / SOFTWARE ENGINEER / SYSTEMS ENGINEER / ENGINEERING LEADER**

Experienced software and systems engineer with fresh skills in Web Development across the server/client 'stack'. Previous Management, Technical Leadership, and Individual Contributor roles in fast-paced development environments. Work characterized by open communication, insight, and drive. "Success is a team skill." Seeking full-time entry-level opportunity in Orlando, FL area or remote.

**GitHub:** rguthrie000. **Portfolio:** <https://frozen-brushlands-28924.herokuapp.com>

Tools & Technologies	DevOps	Previous Experience
HTML / CSS / Client-side Javascript	git, GitHub, heroku	Structured Programming
jQuery, Bootstrap, etc	VS Code & Chrome Inspector	C, Ada, assemblies, others
Node.js & npm; web servers and CLIs	Integrated test (jest)	Embedded hard real-time
mySQL, MongoDB, IndexedDB	Project tools, e.g. CMS, kanban	Time and frequency domains
ORMs (Sequelize, mongoose)	Technical Writing	Parallel & pipelined architectures
React (with hooks) & ES6+	Project Management	MCUs, DSPs, SOMs, SOCs
Templating (handlebars)	Responsive Webpage Design	Waterfall, Rapid, and Spiral Methods
APIs, e.g. Open Weather, Google	Progressive Web Apps	Software Specifications and Test

**PROJECTS**

**(02/20) Divvy Bikes Planner** – Uses two years of trips history to provide ride time between any two stations in Chicago's Divvy bike sharing system. MERN app; Javascript/Express/Node server querying 5.8M-record DB on MongoDB Atlas. Client is 100% React with hooks, with principal npm packages axios, google-maps-react, and victory (charting). Sole author.

(<https://github.com/rguthrie000/rguthrieDivvyBikes> | <https://ancient-harbor-54367.herokuapp.com>)

**(02/20) My Google Books** – Title, author, and subject search of Google Books, with offline storage of your library. MERN app, with server using mLab for CRUD. React client uses Google Books API; app is Progressive & Responsive. Sole author.

(<https://github.com/rguthrie000/rguthrieGoogleBooks> | <https://evening-sierra-31664.herokuapp.com>)

**(01/20) Burger Food Truck** – Full Stack App to track kitchen orders for a Food Truck. Server-side CRUD is implemented in a Models-Views-Controller architecture with an ORM layer (Sequelize over mySQL) for database abstraction. Sole author.

(<https://github.com/rguthrie000/rguthrieBurgerFoodTruck> | <https://damp-taiga-10200.herokuapp.com>)

**(12/19) Make Me Laugh!** – Random jokes, gifs, backgrounds, and funny audio to de-stress your day. Single-Page HTML/CSS (Materialize)/JS+jQuery app using custom event scheduler and multiple APIs for content. Group project; contributed concept, layout, and Javascript event scheduler.

(<https://github.com/panamadan/Project1> | <https://panamadan.github.io/Project1>)

**(11/19-present) Portfolio** – Developer page for rguthrie. Client/Server app with backend 'fortune cookie' generator and front-end carousel of rguthrie projects – above projects, Clicky Game (React), Weather Dashboard (jQuery), more.

(<https://github.com/rguthrie000/rguthriePortfolio> | <https://frozen-brushlands-28924.herokuapp.com>)

**WORK HIGHLIGHTS****11/19 – 02/20 UCF Coding Bootcamp, Full Stack Flex, Full Time**

Leveraged computer science and software engineering experience as a student in this 3-month immersion-style classroom/homework course covering client/server/database technologies. A+ average over 22 programming assignments including 2 team projects.

**1/18 – 1/19: Elbit Systems of America, Director**

Capture Team, USAFNG Passive Airborne Warning System, responsible for architecture of Digital Simulation Model deliverable.

**9/08 – 12/17: Argon ST Electro-Optical Systems (Argon ST is a subsidiary of The Boeing Company), Engineering Manager and Project Engineer**

Engineering manager and technical leader of cross-disciplinary product development team. Most notable: Project Engineer for development of a next-generation hand-held system for day+night imaging, geolocating, and target-marking, used in support of military Intelligence, Surveillance & Reconnaissance and Close-Air Support missions. System architect, UI designer, & algorithmist; authored two US patents and established calibration and assembly trade secrets.

**2/01 – 8/08: Adaptec, Inc., Director of Embedded RAID**

Director of a cross-functional, distributed product development team of 70+ engineers in Florida, California, North Carolina, and Germany providing ongoing modernization of hardware and software for Adaptec's line of Redundant Array of Inexpensive Disks (RAID) Host-Bus Adapters. Executive position responsible for process development, organizational development, and product deliveries to schedule within corporate budgetary constraints. Functional areas: embedded software, Operating System drivers, management software, hardware design, program management.

**8/92 – 1/01: Schwartz Electro-Optics, Inc., Principal Systems and Software Engineer**

Various efforts, including Systems Engineer, Algorithms Designer, & Software Task Leader for a LIDAR-based, helicopter-mounted aerosol cloud geomapping system. Hard real-time 100k SLOC embedded Ada multi-processor application developed by my 12-engineer software team, with UI written in C, Tcl/Tk, and OpenGL under UNIX.

**9/85 – 8/92: Martin Marietta Missile Systems, Senior Engineer**

Multiple Launch Rocket System Terminally Guided Submunition Joint Venture – Software Task Leader for millimeter-wave tracker breadboard flight test program; designed 3-stage pipelined processing architecture using 14 DSPs in C.

**EDUCATION**

<b>UCF Coding Bootcamp, Full Stack Flex, Web Development Certificate</b>	2/2020
<b>MIT, Professional Certificate, Model-Based Systems Engineering</b>	2018
<b>University of Florida, Master of Engineering, Systems Engineering (Engineering Management track)</b>	2004
<b>University of Central Florida, Bachelor of Science, Computer Science (Math Minor)</b>	1986