

# JUSTIN R. GOGAS

990 Sumner Way, Erie, CO • 321.289.7310 • [justingogas@gmail.com](mailto:justingogas@gmail.com)

[www.gogatech.net](http://www.gogatech.net) • [www.linkedin.com/in/justin-gogas](https://www.linkedin.com/in/justin-gogas) • <https://github.com/justingogas/>

---

## SENIOR FULL-STACK SOFTWARE ENGINEER | JUNIOR COMPUTER ENGINEER

- 14 years experience of full-stack web development throughout all lifecycle phases, with 6 years practicing agile scrum methodology.
- Excels at managing large software systems with multiple integration points.
- Over 100,000 lines of code written and over 10,000 pages of documentation produced.
- 11 years of embedded computer systems design and wiring experience.

## TECHNOLOGY SKILLS

- **Traditional languages:** C, C#, Java, Groovy, Python, VB, UNIX shell scripting, XML.
- **Web:** ColdFusion 10, PHP 7, HTML 5, JavaScript, jQuery, CSS, SOAP/REST web services.
- **Database:** SQL, Oracle, Hibernate, MongoDB.
- **Platforms:** Atlassian tools, Git, Microsoft Visual Studio, Unity game engine, Adobe Creative Suite.
- **Hardware:** Arduino, Raspberry Pi, Teensy, EAGLE PCB.

## WORK EXPERIENCE

### Forgotten Dimensions Escape Adventures, LLC

Erie, CO

*Owner and Chief Technology Officer*

June 2018 - present

- Designed, developed, and integrated hardware and software components into one software system: 30+ microcontrollers (Arduino, Teensy, Raspberry Pi), back-end server software (Java, PHP, SQL, and UNIX scripts on Debian 9), game engine PCs, and website front-end to fully control the guest experience.
- Designed, developed, and integrated customer-facing website with customized scheduling system and integrations to payment gateway processor (Stripe).

## NOTABLE PROJECTS

### Interactive Adventure Control System | *Arduino, Java, HTML, JavaScript, jQuery, Bootstrap 4, LAMP*

- Back-end server, embedded code, and web front-end that controls facets of interactive entertainment events (completing objectives, executing controllers based on player progress, final victory or failure conclusion).
- Boilerplate code for embedded systems to make adding new networked modules easy.
- Server to integrate messages from the embedded systems that track player progress.
- Website to track player progress and to manually control room tech through the embedded systems.
- Interactive events are defined once in JSON and read by both the server and website to generate and render all necessary controls and procedures.

Embry-Riddle Aeronautical University

Daytona Beach, FL

- Integrated university systems with vendor systems utilizing web service and API technologies.
- Developed, tested, deployed, and supported multiple software systems (50,000+ lines of total code) to support university objectives and users across the world.
- Developed a custom form builder and framework using snippets that could be pieced together that reduced form development time from days to hours, with administrators able to access form submissions and data.
- Participated in agile lifecycle methodologies with a team of six developers.
- Utilized virtual machine server analogues (Virtualbox, Ubuntu) to production systems for development.
- Administered Oracle server deployments in a load-balanced environment (Weblogic 10g, HTTP Server).

## **NOTABLE PROJECTS**

### **Faculty Payment Voucher** | *ColdFusion, JavaScript, Oracle SQL, Visual Basic*

- Web database with spreadsheet functionality within a web page that applies dozens of business financial decisions to determine how much a faculty member should be paid.
- Translated thousands of lines of VB code into the website front-end.
- Structured data stored as JSON text in database records.

### **Snapshot Generator** | *ColdFusion, Java / Groovy, JS, Oracle SQL, UNIX shell, REST / SOAP web services*

- Massive software system to control enrollments and user account generation from the student information system (Oracle PeopleSoft) to the learning management system (Blackboard and Instructure Canvas) six times per day.
- 280 UNIX shell steps to find data diffs, process into database records, send data to various vendor systems, and perform dozens of post-processing tasks for various business requirements.
- Web front-end provides visibility and control into the UNIX processes.
- Automated components added over time that decreased administration load of 30 hours per week of three personnel in 2011 to less than five hours per week of one person in 2019.
- Presentation in 2017 at CanvasCon at USF in Tampa, FL about snapshot integrations to about 60 university technologists.

## **United Space Alliance, LLC**

Kennedy Space Center, FL

*Computer Science Staff II*

October 2005 - April 2011

- Full lifecycle (requirements, design, development, integration, testing, deployment, maintenance) production of several web database systems.
- Developed department software development standards, document templates, and metrics plan.
- Wrote 50,000+ lines of total code and more than 4,000 pages of documentation (requirements, design, testing, traceability, and user guide documents) across multiple software projects.

## **NOTABLE PROJECTS**

### **Windows Tracking and Mapping System** | *ColdFusion, JavaScript, SQLServer*

- Web database that uses JavaScript to trigonometrically map damages on 2D Space Shuttle windows based on technician measurements.
- Generated maps used by NASA systems engineers in Texas and Florida for damage certification.
- 16,000 total lines of code and 700 pages of documentation.

**Cold Plate Damage Tracking System** | *ColdFusion, JavaScript, Adobe Flash / ActionScript 2.0, SQLServer*

- Web database that plots damage on adjustable images of Space Shuttle avionics cold plates.
- Damage records drawn onto 2D images using Adobe Flash according to technician measurements.

## OTHER PROJECTS

### Mobile Extreme Environment Research Station (MEERS)

August 2015 - May 2016

*JavaScript, jQuery, HTML, CSS, PHP, Atlassian tools (JIRA, Bitbucket, Confluence), agile scrum*

- Two-semester capstone engineering course with the Human Factors department developing an integrated hardware and software solution for simulated communication to planetary expeditions.
- LAMP server running PHP on a Synology DS216j server that provided chat abilities between mission control and a remote team with an adjustable delay of 6 to 20 minutes (Earth to Mars) and hardware sensors life support system monitoring with displays adhering to human factors guidelines.
- Acted as software team lead for two teams (hardware and software) of three undergraduate students each.
- <https://crowdfunding.erau.edu/project/1147>

### Spectrum Navigation, submission to HackRiddle hackathon

October 2016

*JavaScript, HTML, Google Maps API, Google Street View API*

- Website that takes two addresses and provides navigation utilizing landmarks instead of street names to assist those on the autism spectrum that have difficulty with directions.
- Utilized integrations of Google Maps API to pull a list of waypoints, Google Street View API to obtain pictures at waypoints, and Clarafai imaging AI service to recognize and categorize types of landmarks.
- <https://devpost.com/software/spectrumnavigation>

## EDUCATION

### Embry-Riddle Aeronautical University

Daytona Beach, FL

*Bachelor of Science, Computer Engineering and minor, Entrepreneurship*

May 2017

### Project Management Institute

June 2010 - June 2014

*Project Management Professional certification*

### Florida Institute of Technology

Melbourne, FL

*Master of Science, Software Engineering*

August 2008

### University of Central Florida

Orlando, FL

*Bachelor of Science, Computer Science and minor, Digital Media*

May 2005