Eric Ryan Harrison

Employment

Jul. 2023 – Present Make Startups, Inc.

Augusta, GA

Co-Founder and CTO

- Designed, built, and launched an innovative Al-powered business intelligence platform and entrepreneur training system.
- Built a serverless AI engine to process thousands of concurrent slow generative AI requests to handle large amounts of server usage.

Jul. 2021 – Mar 2023 Docket Technologies, Inc.

Chicago, IL

Co-Founder and CTO

- Designed and implemented a workflow management product catered towards in-house legal teams.
- Built and launched a custom email server to ingest legal requests and files.
- 500 Startups Batch 25 graduate company.
- Hired and led a small engineering team to build and develop the Docket platform.
- Worked closely with the CEO to raise venture capital across three rounds.

Aug. 2020 - Mar. 2022 Moonrise, Inc.

Chicago, IL

Co-Founder and CRO

- Inherited a struggling staffing sales organization and introduced process improvements to increase revenues.
- Designed and implemented several new product lines increasing average order size and increased staffing revenue.
- Implemented a soft-pivot during the COVID-19 pandemic to introduce a remote workforce deployment solution that provided offices with a remote sales workforce.

Aug. 2017 - Aug. 2020 Moonrise, Inc.

Chicago, IL

Co-Founder and CTO

- Recruited, and led an engineering organization in building and launching a fully automated on-demand staffing platform.
- Designed, built, and managed an HR staffing automation platform that sent and received several million SMS messages to fill and staff tens of thousands of paying jobs.
- Designed, built, and automated a payroll solution that could pay W-2 workers within minutes of shift completion.

Jan. 2017 – Oct. 2017 American Family Insurance

Madison, WI

Product Architect - Innovation Team

- Developed prototype technology solutions for consideration as viable businesses for corporate spinouts.
- Led the design, funding, and launch of Moonrise.
- Consulted on multiple enterprise technology projects to improve revenues across a wide range of AmFam programs and divisions.

May 2014 – Dec. 2016 ISC Consulting Group, Inc. Sierra Vista, AZ **VP of Engineering**

- Led a team of 10 engineers in the development of over 200 hours of interactive courseware.
- Developed Self-Paced eLearning Courses and Learning Platform Infrastructure for the National Park Service and their Common Learning Platform.
- Designed and developed Experience API (xAPI) enhancements to the National Park Service Common Learning Portal.
- Implemented a machine learning data analysis system using Python and NodeJS to process unstructured social media data into analyzed intelligence products.
- Developed an unstructured data store using MongoDB and MySQL to power large-scale internet social media feed archival.
- Designed a scalable platform architecture based on Docker containers to power multiple internet-scale products.
- Helped write and direct proposal/RFP efforts to secure millions of dollars of new contract work.
- Led the engineering efforts to develop a 3D interactive Serious Game using Unity3d and the Oculus Rift.

Aug. 2012 – May 2014 The Angelo Group, Inc.

Martinez, GA

Lead Engineer

- Served as Lead Engineer for a development team responsible for managing several large government contracts.
- Led the development of a new Courseware Authoring suite using HTML5 and jQuery on the front end, powered by a server built using NodeJS and MongoDB. This application allowed Instructional System Designers to be able to rapidly build distance-learning training products and deploy to any SCORM-compliant LMS.
- Implemented a SCORM template engine to take pre-built, reusable courseware templates and compile the SCOs into a SCORM compliant package. This template engine was built to handle SCORM 2004 v3 and SCORM 2004 v4, with additional work planned to provide for Experience API (xAPI) output in future versions.
- Wrote several technical design documents to provide for an accurate development timeline that also allowed for contractual obligations to be met and all deliverables successfully finished in adequate time.
- Developed a task order portal that allowed The Angelo Group to manage and distribute task orders to sub-contractors and partners.
- Served as the primary technical point of contact for all business development efforts and provide rough order of magnitude estimates for the technical requirements of any given contract.

Senior Software Engineer

- Served as the lead systems administrator for the site's SunOS web server
 powering all websites hosted on site. Responsible for the initial
 configuration of the server running Apache, mod_php, Python, and all
 essential libraries necessary to the operational requirements of the existing
 applications installed on the old webserver.
- Designed and developed an enterprise application to handle and control all visitor requests for our facility. This application was developed using PHP and jQuery and replaced the old system with a fast, AJAX-powered interface that improved the process of administering visit requests and provided powerful new functionality to the Corporate Affairs office.
- Worked on a small team to create a large-scale Configuration Management System using PHP, ExtJS, and MySQL.
- Designed and built an innovative application interface using ExtJS to launch over 60 separate Configuration Management database applications.
- Built over 40 user-friendly interfaces in ExtJS to provide the Configuration Management Team with a lightweight method of manipulating data stored in the MySQL database.
- Developed a customized report builder using PHP and JavaScript to give our users a simple method of building complex multi-table queries to retrieve and display large amounts of data in a readable format with multiple options to automatically export datasets to Excel or PDF.
- Wrote several scripts to migrate data from the original database structure to an improved version developed to meet new requirements.

May 2007 – April 2008 Morris DigitalWorks

Augusta, GA

Developer

- Was lead developer on a project to develop a new search engine using PHP to connect to a FAST database installation to service over 15 regional newspapers.
- Served as assistant database administrator for all MySQL installations within the company, performing tasks such as database backups and recovery as well as user account creation and role maintenance.
- Lead developer on an experimental social travel website that allowed users to track and manage their travel experiences.

July 2005 – June 2007 United States Army

Fort Gordon, GA

METRICS Application Developer

- Developed web based applications using mod_perl and HTML::Mason to interface with both Oracle and MySQL databases. These applications generate valid XHTML incorporating Cascading Style Sheets (CSS) and use JavaScript to attach event handlers to create a responsive interface for the users.
- Assisted in the management of roughly 6500 user accounts and helped with the daily maintenance of two Sun servers and RAID arrays.
- Designed and implemented a framework in HTML::Mason that all developers in the NSA/CSS Georgia METRICS development team use to

generate complex application templates with minimal effort. Developers use the application programming interface (API) of the framework to quickly define the various key components of an application. This framework has provided a standardized platform from which the development team can develop new web based applications that successfully execute on all web browsers that we target. This cross-browser compliance effort has alleviated many of the most painful problems that plague similar web applications. This framework also serves to compress overall page load times for our applications and limit the content being served to the users to only the code necessary to service the active section of the application the user is working in.

- Developed a Content Management System (CMS) that over 100 separate webmasters use to modify and create web pages for 85 unique organizations within the NSA/CSS Georgia's Signals Intelligence Directorate. The CMS was built specifically to handle the strict requirements regarding data classification and access controls for each individual web page. It also allows webmasters to use a variety of pre-built plugins to be used to add dynamically generated pages to each organization's web site and removes the large burden that is normally associated with maintaining the data that is contained on web pages.
- Trained the web masters of the NSA/CSS Georgia's Signals Intelligence
 Directorate in the use of the CMS. Made sure that they were aware of the
 requirements for developing web pages that followed accepted web
 standards published by the World Wide Web Consortium.
- Developed an application to allow administrators of various organizations within NSA/CSS Georgia to post job vacancy announcements. This tool also provides an interface that allows potential job candidates to apply for the position online and then allows administrators to review the application and decide if the candidate will be accepted for the opening.
- Developed a large application called the Combined-Analyst Request Tool (CART) that provides a global interface to allow users to request the support of NSA/CSS Georgia operational assets and allows the members of NSA/CSS Georgia to respond to those requests in a timely manner. Since CART was launched, it has successfully managed over 1300 requests at an average rate of 88 requests per month. This application was so well received that a second version of this tool was developed for a separate organization to use in their request management process.

August 2003 - July 2005

Fort Gordon, GA

Digital Network Intelligence Analyst

- Performed global network analysis with a digital network intelligence (DNI) focus to gain and maintain information superiority through the use of sophisticated analysis tools and collection techniques.
- Designed and implemented a dynamic web site utilizing PHP and MySQL for the Digital Network Intelligence office. Prior versions of the DNI web site were static pages that served as a list of contact numbers for the office. The office was able to use this newly developed system as a project management platform to coordinate between members of the smaller project teams. This system also provided a mechanism for flexible task tracking and logging down to the individual level as well as providing a centralized team management interface that team leaders used to view the status of ongoing research projects.

- Solely responsible for several high-value targets of which I oversaw intelligence from the beginning to end. Shared unique analysis with national agency and wrote and published final product reports for those targets.
- Served as a Cisco Systems technical advisor for the office and provided various project teams with key information regarding specific products such as Cisco router, switch, and firewall configurations for various Cisco IOS versions.
- Trained and mentored junior analysts on mission-related tasks; conducted on-the-job training by actively engaging personnel in analysis and reporting; provided constructive feedback of assigned targets. Consistently sought self-improvement and professional development.

Education

1999 - 2002

Lake Central High School

St. John, IN

High School Diploma

- Introduction to C++
- Introduction to Programming with Visual Basic
- Advanced Programming with Visual Basic
- 2 Year Cisco CCNA Course

Certifications

- ITIL Foundations V3
- COMPTia Network+
- COMPTia Security+

Publications Books

- Programming is Easy: Building Web Applications with PHP [2024]
- An Introduction to Robot Programming, Second Edition [ISBN: 1977685587] http://www.amazon.com/Introduction-Robot-Programming-Robots-MRK-1/dp/1977685587/
- An Introduction to Robot Programming, First Edition [ISBN: 1523616083] http://www.amazon.com/Introduction-Robot-Programming-Robots-MRK-1/dp/1523616083/

Youtube

Programming is Easy - https://youtube.com/@ProgrammingIsEasy

Technology

Technical Skills

PHP, Javascript, Python, C#, C, Python, Perl, HTML, CSS

Frameworks and Libraries

Unity3d, Godot, htmx, NodeJS/Bun, PHPainfree, Wordpress, Experience API (xAPI), SCORM

Databases

MySQL, MongoDB, Oracle, Sybase, Postgres, SQL Server, Redis

Operating Systems

 ${\tt Docker,\,Mac\,OS\,X,\,Linux,\,FreeBSD,\,NetBSD,\,OpenBSD,\,Solaris,\,Microsoft\,Windows}$

References References available upon request.