

Justin Newman

+1(804) 832-9881 ◇ Woodbridge, VA

justin.newman@metalinguist.com ◇ <https://newmanjustin.com> ◇ [LinkedIn](#)

SKILLS AND PROFICIENCIES

Git, Linux, Java, JavaScript, Python3, C, HTML, CSS, PHP, MySQL, R, React.js, DynamoDB, Firebase, Ghidra. Gaussian Elimination, CRT for Modular Exponentiation.

INDUSTRY-RELEVANT COURSES

Applied Algorithms, Software Engineering, Computer Systems II, Discrete Structures II, Calculus II, Database Systems, Parallel and Distributed systems, Statistics, Web Development, Linear-Algebra, Machine Learning.

JAMES MADISON UNIVERSITY

Bachelor of Science in Computer Science.

Minor study in Data Analytics

Graduation - May 2023

GPA: 3.14

BEST AWARDS AND HONORS

President's List.

Spring 2022

Dean's List.

Fall 2022

Dean's List.

Spring 2023

SELECTED APPLICATIONS

MelodifyLabs.com (Next, Firebase, Vercel)

Created a full stack platform for converting user text prompts into songs. Deployed with vercel web hosting, next-generation secure authentication, OpenAI API lyric generation, utilized text-to-speech API for vocal generation. Firebase storage for mp3 file retrieval. [Live App](#)

CSCode.org (React, Next-Auth, Tailwind CSS)

Created a working full stack social media application. Implemented cutting-edge security using next auth Google authentication, Firebase administration panel, photo uploading and deletion, commenting, sharing, and liking functionalities. Profile pages and user profile photos. Used scalable systems to account for a rapidly growing community and user activity surges. [Live App](#)

Web Dev Club (HTML, CSS, PHP, JS)

Founded a Web Dev Club for like minded students and educators. We frequently held group meetings and discussed different techniques for front end web development and data visualization. [Live App](#)

CONFIDENTIAL ONGOING COMPUTER SYSTEMS EXPERIENCE

I maintain a remarkably comprehensive understanding of cybersecurity and computer systems, I adeptly employ the analytical skills required to pinpoint and exploit security vulnerabilities within various encryption strategies. Through meticulous reverse software engineering, utilizing open source solutions like the NSA's Ghidra software, I am more than capable of infiltrating susceptible systems and recovering vital information for digital forensics investigations.

ADDITIONAL EVOLVING AGILE DEVELOPMENT EXPERIENCE

Junior Software Engineer contracted by [Metalinguist LLC](#).

2/22/2023 - Present

[Metalinguist](#) is a client portal/digital storefront for the translation industry with CAT tool integrations.

Technologies used include React, Node.js, Javascript, DynamoDB, AWS, and MUI. Contributions include:

- Implemented multiple **dynamic data visualization components** on administrative and client dashboards.
- Implemented a fully functional **Google OAuth2.0 Login** with google button utilizing react-oauth/google.
- Enhanced field validation, ensuring data integrity and mitigating duplicate entries by implementing text field validation logic employing **efficient DynamoDB queries** for secure, precise, and effective validation.
- Contributed various additional solutions and features to the Metalinguist administrative team, leveraging best practices such as **well organized functional components, higher-order functions, and React.js hooks.**

Technical Operations contracted by [Telemedia Productions](#).

9/20/2018 - Present

During my employment I have provided diverse forms of technical assistance to the crew including iPhone screen repair, freelance software engineering, camera operation, replay-unit operation, and statistical graphics rendering.

- Developed an automated open source **ESPN-Inspired Athletic Statistical Graphics Rendering software** that gathers individual player data for each athlete and generates ESPN-style informational graphics. Leveraged Java and Jsoup library, processing team roster URLs to efficiently collect and present the statistics. Generates graphics for entire team's in seconds including sideline personnel, for all sports, for almost all universities.