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Summary

Recent graduate pursuing a career in web development. Strong problem solving skills developed from a math and physics background. Motivated worker with personal projects using both front-end and back-end technologies. Eager to collaborate and build relationships.

EDUCATION

## University of Pittsburgh, Pittsburgh, PA

Bachelor of Science in Physics

Aug. 2013 – Aug. 2016

Selected Courses: Computational Physics (Python), Linear Algebra, Complex Variables

## University of Maryland, College Park, MD

Undergraduate Engineering

Aug. 2012 – May 2013

Selected Courses: Intermediate Java, Calculus III, Differential Equations

Projects

## Twitch.tv Collaborative Development Application

github.com/justinclagg/community-twitch-development

- Developed a full stack SPA that allows Twitch streamers to collaborate with viewers on a development project. Users can work on tasks created by admins, and submit their work when finished. Includes the ability to grant private repository access to paid stream subscribers.
- React and Redux front-end with a Node server. Includes Twitch.tv and Gitlab.com OAuth2 authentication, creating a cookie with a session id. User sessions, profiles, and tasks are stored in a MongoDB database, with tasks cached through Redis. Real-time updates are pushed using WebSockets.
- In use by a streamer with an average 100 concurrent viewers at https://collab.hardlydifficult.com.

#### Local Weather Application

github.com/justinclagg/local-weather

• A jQuery application that displays the user's local weather. Uses the geolocation API with a fallback to an IP based location.

## FreeCodeCamp.com Front-end Curriculum

free code camp. com/just in clagg

• Received a front-end development certificate for creating 11 applications and completing 50 JavaScript algorithm challenges.

Work Experience

# National Institute of Standards and Technology, Gaithersburg, MD

Guest Researcher

Aug. 2013 – Jan. 2015

- Adapted C++ code created during internship to current research problems
- Collaborated with NIST and American University employees

 $Physics\ Intern$ 

May 2013 – Aug. 2013

- Worked on more efficiently simulating interactions between atoms
- Self-taught C++, Fortran, Matlab, and Unix commands
- $\bullet$  Finished C++ code was 200 300% faster than previous methods
- Formally presented work to NIST employees and interns

TECHNOLOGY

Front-end: Html5, Sass, ES6 JavaScript, iQuery, React, Redux

Back-end: Node, MongoDB, Socket.io Tools: Git, Webpack, Gulp, Mocha