

ESRGC Internship

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ESRGC

- GIS services
 - Spatial Data Management, Collection and Analysis
 - Technical GIS support
 - Mapping and Cartography
 - Web Mapping
- Maryland Government Contracts
- Small company

Programming Responsibilities

- Web application development and maintenance – JavaScript
- Automation Scripting – Python
- Server Maintenance
- Windows and Linux

Web Applications

- Dashboard interfaces that allow users to explore and analyze geographic data
- Users view information through animated charts and interactive maps.
- Many of our charts use GeoDASH, an open-source JavaScript library developed at the ESRC using D3.js.
- New chart types and methods of data visualization are continuously being developed.

Web Technologies

- Client-Server relationship
- Webservers with Node.js
- Client-Side: Backbone, Handlebars, Leaflet, D3
- Server-Side: Express, Socrata / Postgres, PG

Other Technologies

- NPM, Grunt, Git/Github
- SQL, Postgres, SQL server
- HTML/CSS
- Python, C#

Familiar Concepts

- Object Oriented Design
- Event Driven Programming
- Simple to moderate algorithms

New Concepts to learn

- User Interface
- FTP/SFTP, working through SSH
- Working with clients and the ESRGC team
- Working with other peoples code
- Using and maintaining open-source libraries
- Client-Server, MVC
- Full time programming

Biggest Challenges

- Working independently with little to no documentation
- CSS – Styling
- Debugging the UI