Ethan Shepherd

Full Stack Java/JavaScript Developer

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SKILLS

Languages Primary: JavaScript, Java Secondary: Groovy, Python, C

Frameworks/Libraries Spring/Boot, React, AngularJS, D3, jQuery, Node

Other Oracle, iBatis, MongoDB, Selenium, Cypress, Git/SVN, Linux

EXPERIENCE

National Centers for Environmental Information

June 2012 - Present

Web/Applications Engineer - Station Metadata/Paleoclimatology Teams

Asheville, NC

Design and create Java/JavaScript web applications, REST web services, visualizations, and Groovy server-side applications to ingest and access ground station and paleoclimatology metadata

- <u>Paleo DIVER</u> [Java, Spring, iBatis, React, D3JS, ArcGIS API]: Paleoclimatology data search, access, and download via web UI or RESTful API.
- <u>HOMR</u> [Java, Spring, iBatis, jQuery, D3JS]: Access ground station history data via dynamic web UI or RESTful API.
- Metadata Ingest [Groovy]: Modular and configurable ETL system to retrieve and integrate station history data from a variety of sources.
- Normals and Climate Atlas [React, jQuery]: Visualization and access tools.

National Climatic Data Center

November 2009 - June 2012

Scientific Programmer - Remote Sensing Division

Asheville, NC

C and Fortran scientific data application maintenance, and transition to operations. Java/Spring web application maintenance and development.

- NOAA Climate Data Records [C, Fortran]: Refactored scientific data applications from research to operations. Required coding for portability and ease of use, standardizing output, and creating documentation.
- Bilotta, Rocky, Jesse E. Bell, Ethan Shepherd, and Anthony Arguez. Calculations and evaluations of an air-freezing index for the 1981-2010 climate normal period in the coterminous United States. JAMC

National Climatic Data Center

February 2008 - November 2009

Systems Analyst / Web Applications Developer - Climate Model Access Team

Asheville, NC

Web application development and maintenance using JSP, Java Servlets, Perl/CGI, and PHP. Installation and maintenance of various specialized data access servers and applications in RHEL 5.

BitTorrent [Linux, Python]: Initiated the use of BitTorrent at NCDC. Proposal to management, software
evaluation, performance testing, and writing operational scripts. Presented results at the 2009 American
Geophysical Union annual meeting.

Personal Projects GitHub

• [Java, JavaScript (React, jQuery, AngularJS, VueJS, D3JS, NodeJS), Python, Android, Mongodb, Groovy/Grails]: Various web and Android hobby projects. Set list matcher, habit tracker, eclipse traffic viz, etc.

EDUCATION

Georgia Institute of Technology

2014-2016

M.S. in Computer Science (spec: Computing Systems)

University of North Carolina, Asheville

2005-2007

B.S. in Computer Science