# **Ethan Shepherd**

Full Stack Java/JavaScript Developer

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#### **SKILLS**

**Languages** Primary: Java, JavaScript Secondary: Groovy, Python, C Frameworks/Libraries Spring/Boot, React, AngularJS, D3JS, jQuery, Selenium

Other Oracle, MongoDB, MySQL, 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, AngularJS, 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 <u>GitHub</u>

• [Groovy/Grails, Java, JavaScript (React, jQuery, AngularJS, D3JS, NodeJS), Python, Android, Mongodb]: 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