

# Ethan Shepherd

Full Stack Java/JavaScript Developer

(828) 242 0036  
ethan.m.shepherd@gmail.com  
[ethanshepherd.com](http://ethanshepherd.com)

## SKILLS

<b>Languages</b>	<b>Primary:</b> JavaScript, Java <b>Secondary:</b> Groovy, Python
<b>Frameworks/Libraries</b>	Spring/Boot, React, AngularJS, D3, jQuery, Node
<b>Other</b>	Oracle, iBatis, MongoDB, Selenium, Cypress, Git/SVN, Docker

## EXPERIENCE

<b>Lawrence Livermore National Laboratory</b> <i>Web Software Engineer - National Ignition Facility</i>	October 2023 - Present Livermore, CA
------------------------------------------------------------------------------------------------------------	-----------------------------------------

Modernize optics and target diagnostics web applications

- *BLM/SLM Calc* [Spring/Boot, OracleAQ, Docker]: Extract and modernize optics blocker and shadow calculation code.
- *Optics Loop Tool* [Spring/Boot, React, Oracle]: Refactor legacy web application for optics flaw review.

<b>National Centers for Environmental Information</b> <i>Web/Applications Engineer - Station Metadata/Paleoclimatology Teams</i>	June 2012 - October 2023 Asheville, NC / Las Vegas, NV
-------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------

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

- *Paleo DIVER* [Java, Spring, iBatis, React, D3JS, ArcGIS API]: Paleoclimatology data search, access, and download via web UI or RESTful API.
- *HOMR* [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.

<b>National Climatic Data Center</b> <i>Scientific Programmer - Remote Sensing Division</i>	November 2009 - June 2012 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](#)

<b>National Climatic Data Center</b> <i>Systems Analyst / Web Applications Developer - Climate Model Access Team</i>	February 2008 - November 2009 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

<b>Georgia Institute of Technology</b> M.S. in Computer Science (spec: Computing Systems)	2014-2016
----------------------------------------------------------------------------------------------	-----------

<b>University of North Carolina, Asheville</b> B.S. in Computer Science	2005-2007
----------------------------------------------------------------------------	-----------