Ethan Shepherd

Full Stack Software Engineer

(828) 242 0036
ethan.m.shepherd@gmail.com
ethanshepherd.com

SKILLS

Languages	**Primary**: Java, JavaScript, Groovy **Secondary**: Python, C, Fortran
Frameworks/Libraries	Spring, AngularJS, jQuery, D3JS, Grails
Other	Oracle, MySQL, SVN/Git, Linux, Bash

EXPERIENCE

National Centers for Environmental Information June 2012 - Present

Web/Applications Engineer - Station Metadata/Paleoclimatology Teams Asheville, NC

Create Java/Groovy/Spring 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, AngularJS]*: Paleoclimatology data access via web UI or RESTful API.
- *HOMR [Java, Spring, iBatis, jQuery]*: Access station history data via a dynamic web UI, or a RESTful API.
- *Metadata Ingest [Groovy]*: Designed and built a modular and configurable system to retrieve station history data from a variety of sources, and integrate this data into NCEI's common station history format.
- *Normals, Trends, and Climate Atlas [jQuery, D3JS]*: 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, Bash, Python]*: Initiated the use of BitTorrent at NCDC. Handled proposal to management, evaluation and installation of clients and servers, performance testing, writing of operational scripts, and seeding 30 TB of data. Presented results at the 2009 American Geophysical Union annual meeting.

Personal Projects GitHub

- *[Groovy/Grails, Java, JavaScript (jQuery, AngularJS, D3JS, NodeJS), Python, Android, Mongodb]*: Life-Tracker personal metric tracker for Android, FriendLibrary inter-personal media loan tracking web application, Asheville crime mapper, Asheville transit mobile redesign with interactive geolocated maps, 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