

Justin P. Linick

Earth Surface Science Group

Jet Propulsion Laboratory, Mail Stop 183-501, 4800 Oak Grove Drive, Pasadena, CA 91109

Phone: +1-818-354-5731 Email: Justin.P.Linick@jpl.nasa.gov

Education

Trinity University, B.S., Physics, 2004

Pasadena City College, Computer Science, 2010 -2012

Academic Experience

Software Engineer for Scientific Applications 2013 Present, JPL, Pasadena, CA. Developed remote sensing algorithms to automate thermal anomaly detection with ASTER data.

Expanded upon the ASTER Volcano Archive (AVA) to accommodate LANDSAT and EO-1 products. Integrated NOAA volcano plume data and ASTER GDEMs into the AVA, and maintained and improved the AVA website. Developed and implemented global plume detection and analysis algorithms for ASTER data. Participant in ASTER In Situ Cal/Val Project CARTA 2013/2014 Mission Deployment.

Internship 2012 -2013, JPL, Pasadena, CA. Designed and built the ASTER Volcano Archive.

Automated procedures for the retrieval and ingestion of data from ECHO/LP DAAC, as well as the update and maintenance of the AVA website. Produced a client for streamlining the retrieval of geospatial data using the ECHO/REVERB API. Created new products for the AVA dataset, such as thermal anomaly detection, decorrelation stretching, cloud detection and SO₂ analysis.

Relevant Experience

System Developer 2015-Present. Pasadena, CA. Independently built a large scale dynamic web service which provides real-time collaborative tools to more than 1.2 million users worldwide. Designed a flexible architecture to accommodate thousands of simultaneous users to interact and communicate using a minimum of computing resources. Designed and constructed both front and back end services.

Leadership Experience

United States Marine Corps, Infantry, 2005 -2009

Team/Squad Leader

Helmand Province, Afghanistan 2008. Directly responsible for the morale, discipline, and welfare of a team/squad of Marines. Trained and mentored Afghan National Police forces. Led Marines through foot patrols as well as mounted operations throughout Helmand province. Was selected as Marine of the Quarter from among over 1,000 Marines during operations in Afghanistan. Combat meritoriously promoted to Corporal.

Rifleman/Radio Operator

Saqlawiyah, Iraq 2007. Provided communications ability and intelligence gathering for squad-level operations. Conducted more than 250 mounted/dismounted patrols. Decorated for actions leading to the capture of several high value targets.

Programming Experience

Programming Languages/Frameworks: Python, C++, Java, Assembly, Perl, PHP, CSS, JavaScript, MySQL, AWS, EC2