

David Bekaert

Resume

Personal

Name: David Bekaert
E-mail: David.Bekaert[at]jpl.nasa.gov
Nationality: Belgian

Key attributes

- Effective team player with proven track record in multi-disciplinary settings.
- Strong communicator, both orally and in writing.
- Passionate about my work and driven to achieve results in a timely manner.
- Results oriented with strong publication record and conference participation.
- Cultural sensitivity with work experience in multi-cultural environments.
- Ability to adapt to emerging problems and open to different insight.

Current

Radar Scientist at the Radar Science and Engineering section of the Jet Propulsion Laboratory Oct 2016 - current

Education

University of Leeds, United Kingdom Sep 2012 - Dec 2015

- Doctor of Philosophy: Geophysics and Geodesy
PhD Thesis: Interferometric Synthetic Aperture Radar for slow slip applications

Stanford University, United States of America Jan 2015 - Feb 2015

- Visiting student researcher School of Earth Sciences with Paul Segall. Development of a Network Inversion Filter combining GNSS and InSAR.

International Space University, France Jun 2013 - Aug 2013

- Participant at the 2013 Space Studies Program.

Delft University of Technology, Netherlands Sep 2008 - May 2011

- Master of Science: Earth and Planetary Observation, **with distinction**.
Thesis: InSAR time series analysis of the 2006 slow slip event on the Guerrero Subduction Zone, Mexico.
- Honors Track: Remote Sensing

Delft University of Technology, Netherlands Sep 2005 - Aug 2008

- Bachelor of Science: Aerospace Engineering, **with distinction**.

Working experience

Caltech Postdoc at Jet Propulsion Laboratory Oct 2015 - Oct 2016

- Space and airborne InSAR to study subsidence in New Orleans and Sacramento Delta. Investigating impact of tropospheric noise on UAVSAR InSAR applications.

YGT at the European Space Agency (ESTEC) May 2011 - July 2012

- Young Graduate Trainee at the Microwave Instruments section of the Earth Observation division (EOP-PIM). Developing and implementing a clutter suppression algorithm for ESA's P-band Ice sounder radar (POLARIS).

Intern at the European Space Agency (ESTEC) Jan - April 2011
• Stagiaire at the Wave Interaction and Propagation section (TEC-EEP). Use of microwave models to analyze the impact of snow grain size on the backscatter for Ku and X band radars.

Jet Propulsion Laboratory Visiting Student Researcher Jan - May 2010
• JPL affiliate at the Radar Science and Engineering Section. Investigating the usage of time series InSAR for extracting slow slip events in Guerrero, Mexico. Collaborating in JPL radar projects.

Teaching assistant

• Inverse Theories (University of Leeds)	2013, 2014
• Tectonophysics (University of Leeds)	2012, 2013
• Geological Field and Map skills (University of Leeds)	2012
• Multivariate Data Analysis (Delft University of Technology)	2009

Past and Current projects (selected)

- Science product lead of ARIA
- Member of the NASA Sea-Level Change Team
- Member of the NASA High Mountains Asia team
- Member of the NASA Communities and Areas at Intensive Risk demo team
- Developer and online support of TRAIN - Toolbox for Reducing Atmospheric InSAR Noise
- Developer of ingesting JPLs ISCE processor into StaMPS
- Co-developer and online support for time-series InSAR StaMPS package
- Co-developer of ISCE Sentinel-1 and Stripmap stack processors
- Contributor to the ISCE processing software

Current Postdocs

- Dr. Ekaterina Tymofyeyeva
- Dr. Jeremy Maurer

Languages

Dutch, mother tongue
English, speak, read and write
French, intermediate

Technical skills and competences

Programming skills

- Matlab
- Python
- Bash, Cshell
- GMT
- GDAL

Program experience

- Office: Word, Excel, PowerPoint and Outlook
- Latex
- IDL
- Photoshop, Illustrator, Adobe
- QGIS, ArcGIS

Operating systems

- Windows
- Mac OS
- Linux