DAVIDE DONATI, Ph.D.

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PROFILE

I am a Junior Assistant Professor of Engineering Geology at the Alma Mater Studiorum – Università di Bologna and Bologna Business School, member of the BBS Centre for Sustainability and Climate Change at BBS and the Centre for Natural Hazards Research at the Simon Fraser University (Canada). My areas of expertise include remote sensing and numerical modelling of large landslides for hazard and risk assessment. My research is focussed on the investigation of rock mechanics, slope damage, and the effects of endogenic and exogenic processes on the stability and progressive failure of natural and engineered slopes. I co-authored 39 publications (26 currently indexed on Scopus), many of which as first and/or corresponding author. I acted as peer-reviewer for various indexed international journals (including Landslides, Engineering Geology, Journal of Maps, Natural Hazards and Earth System Sciences, Geosciences, and Geomatics, Natural Hazards and Risk, Remote Sensing, Bulletin of Engineering Geology and the Environment, and others).

1. RESEARCH ACTIVITY AND AWARDS

RESEARCH POSITIONS

03/2021 – present: (1 year, 8 months)	 Junior Assistant Professor (RTDa) Alma Mater Studiorum – Università di Bologna Bologna Business School Centre for Sustainability and Climate Change Involvement in research projects: Geomorphic and engineering geological characterization of the Fels Slide (Alaska, US) using remote sensing and numerical modelling methods. Effects of climate change on stability of soil and rock slopes.
06/2019 – 02/2021: (1 year, 9 months)	 Post-Doctoral Fellow (PDF) Simon Fraser University, Vancouver, Canada Involvement in research projects: Geomorphic and engineering geological characterization of the Fels Slide (Alaska, US) using remote sensing and numerical modelling methods. Numerical modelling of co-seismic landslides. Stability and risk assessment of Mt. Currie (BC, Canada).
09/2014 – 05/2019: (4 years, 8 months)	 Ph.D. in Engineering Geology and Rock Mechanics Simon Fraser University, Vancouver, Canada Project title: "The characterization of slope damage using an integrated remote sensing-numerical modelling approach". Research themes: slope stability; slope damage; remote sensing; numerical modelling; rock mechanics; brittle fracture of rock.
QUALIFICATIONS	
09/2022	Abilitazione Scientifica Nazionale (ASN, National Scientific Habilitation) Settore Concorsuale 04/A3 - II Fascia (14/09/2022 – 14/09/2032)
AWARDS	
2022:	Poster award Conference: Il ruolo del monitoraggio nello studio e nella gestione del rischio idrogeologico per la tutela del territorio montano (September 28-30, 2022 – Badia, Italy)

2020:

Premio "Dottori di ricerca"

Institution: AIGA (Associazione Italiana Geologia Applicata e Ambientale)

2. <u>TEACHING EXPERIENCE</u>

TEACHING ACTIVIT	Υ
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05/2021 – present:	Lecturer (module leader)
	University of Bologna Course: Application of remote sensing and numerical modelling methods for rock mass characterization and slope stability analysis (starting September 2021)
	Course level: PhD
	Course content (to date): Basic rock mechanics and rock slope stability concepts, overview on remote sensing methods for rock mass characterization and discontinuity mapping, introduction to numerical modelling methods.
03/2021 – present:	Lecturer (module leader) Bologna Business School Course: Geohazard and sustainability
	Course level: MBA and Executive MBA
	Course content (to date): Types of natural hazards and controlling factors. The concept of risk. Risk management at national and supranational level. Effects of natural hazard, events, and disasters on business. The impact of natural hazard on sustainability.
03/2021 – present:	Lecturer (module leader)
	Bologna Business School Course: Georischi e sostenibilità (in italian)
	Course level: MBA and Executive MBA
01/2018 - 04/2020:	Course content (to date): Types of natural hazards and controlling factors. The concept of risk. Risk management at national and supranational level. Effects of natural hazard, events, and disasters on business. The impact of natural hazard on sustainability.
(spring term of each	Simon Fraser University, Vancouver, Canada
year: January to May)	EASC313 – Introduction to soil and rock engineering.
	Course level: 3 rd year undergraduate degree.
	Course contents: Physical properties of soil and rock. Field description and engineering classification. Principles of effective stress, consolidation, and settlement. Index tests, compressive, tensile and shear strength of soil, rock, and rock discontinuities. Rock mass characterization. Influence of structural geology, groundwater, and seismicity on engineering performance. Introduction to the use of ground based remote sensing in rock engineering.
	Teaching load: 70 hrs (comprising of lectures and laboratory sessions).
	Duties: course organization, development, and presentation; mid-term and final exam preparation, invigilation, and marking; teaching assistant management and guidance; organization of guest lectures and seminars; development of laboratory activity and field work.
01/2015 - 04/2016:	
(spring term of each year: January to May)	Co-lecturer (teaching assistant) Simon Fraser University, Vancouver, Canada EASC313 – Introduction to soil and rock engineering.
	Teaching load: 50 hrs.
	Duties: demonstrations and presentations during laboratory sessions, laboratory assignment marking; exam invigilation; assistance during field work; student tutoring.

TUTORING ACTIVITY

03/2021 – present:	 Alma Mater Studiorum - University of Bologna Final M.Sc. thesis co-advisor: Mr. Mehdi Ataeian (University of Bologna, to be completed in November 2022).
06/2015 – 02/2021:	 Simon Fraser University, Vancouver, Canada Final M.Sc. thesis co-advisor: Mr. Nicola Fullin (University of Ferrara, July 2020).
	Tutoring and technical remote sensing and numerical modelling training to engineering geology graduate students and international visiting research students.
CERTIFICATES	
01/2022 – 07/2022:	International Teaching Programme (2 5-day modules)
	The programme aimed at improving teaching and communication skills, particularly in master and executive education. The first module aimed at enhancing effectiveness of online teaching, the second module, organized at the INSEAD Business School (France) was focused to in-person teaching skills.
01/2019 – 04/2019:	Effective Intercultural Communication (15-hour course)
	Theme and contents: Enhance intercultural understanding and communication skills through developing self-awareness; identification of cultural influences; gaining insight into cultural rules, norms, and biases, and using empathy to discuss the interconnection and complexity of culture and communication.
01/2019 – 04/2019:	International Teaching Assistants (30-hour course)
	Theme and contents: Enhance skills in formal presentations and in leading and participating in tutorial-style group discussions; understanding of academic culture in Canada and undergraduate students' backgrounds and expectations; understanding of North American life, society, and culture.

3. PARTICIPATION IN RESEARCH PROJECTS

CO-INVESTIGATOR IN RESEARCH PROJECTS WITH NATIONAL AND INTERNATIONAL RESEARCH INSITUTES, UNIVERSITIES, AND GOVERNMENTAL ENTITIES

03/2021 – present: (4 months)	Project: Impact of climate change on the progressive failure of soil and rock slopes
	Participants: Alma Mater Studiorum- Università di Bologna (Italy), Bologna Business School (Italy).
	Research theme: Investigating the role of extreme climatic events on short- and long-term stability of slopes.
	Project duration: 2021-2024
07/2017 – present: (3 years, 2 months)	International project: Engineering geological characterization of the Fels Slide (Alaska, US)
	Participants: Simon Fraser University (Canada), University of Alaska Fairbanks (US), Alyeska Pipeline Service Company (US).
	Research theme: Investigating the geological factors controlling the evolution of the rock slope using field methods, remote sensing techniques, and numerical modelling methods; Analysis of the role of the glacial retreat from the valley on the progressive retrogression of the instability.
	Role: Rock mechanics specialist, Remote sensing analyst, Numerical modelling specialist.
	Project duration: 2017-2023 (expected)

07/2015 – 05/2019: (3 years, 10 months)	National Project: Characterization and modelling of the Downie Slide (BC, Canada)
	Participants: Simon Fraser University (Canada), BC Hydro and Power Authority (Canada).
	Research theme: surface and sub-surface characterization of the Downie Slide using remote sensing techniques and numerical modelling.
	Role: Rock mechanics specialist, Remote sensing analyst, Numerical modelling specialist.
02/2016 – 02/2017: (1 year)	National project: Preliminary structural and geomechanical investigation of the south-western side of the Hawkesbury Island (Central BC)
	Participants: Simon Fraser University (Canada), Natural Resources Canada (Canada).
	Research theme: investigating a structurally controlled rock slope for the evaluation of tsunami hazard within the Kitimat fjord.
	Role: Rock mechanics specialist, Remote sensing analyst.
04/2017 – 08/2018: (1 years, 4 months)	National project: Characterization of Spatio-Temporal Slope Damage associated with the Ten Mile Slide, near Lillooet, BC
	Participants: Simon Fraser University (Canada), BGC Consulting (Canada), BC Ministry of Transportation and Infrastructure (Canada).
	Research theme: analysis of the spatio-temporal evolution of slope damage using remote sensing techniques; development of methods for assessing and visualizing the progressive change of surface damage intensity, due to formation and accumulation of tensile cracks in an unstable slope in soil.
	Role: Remote sensing analyst.

4. DISSEMINATION ACTIVITY

RESEARCH PRESENTED AT NATIONAL AND INTERNATIONAL CONFERENCES

09/2022:	Oral presentation at SGI-SIMP joint congress "Geosciences for a sustainable future" (Turino, Italy- n. 27 in publication list).
06/2022:	Oral presentation at TC 301 - IS NAPOLI 2022, Third international symposium on Geotechnical engineering for the preservation of monuments and historic sites (Naples, Italy - n. 15 in publication list)
09/2021:	Oral presentation at VII AIGA (Associazione Italiana di Geologia Applicata e Ambientale) national congress (Lecco, Italy - n. 28 in publication list)
04/2021:	Oral presentation at the virtual EGU (European Geosciences Union) 2021 conference - n. 30 in publication list
05/2020:	Oral presentation at the 2020 International Symposium on Slope Stability in Open Pit Mining and Civil Engineering (Perth, Australia, online conference - n. 17 in publication list).
12/2019:	Oral presentation at the AGU 2019 Fall Meeting (San Francisco, US - n. 31 in publication list).
10/2019:	Oral presentation at the 14th ISRM International Congress of Rock Mechanics (Foz do Iguacu, Brazil - n. 18 in publication list).
10/2018:	Oral presentation at the 10th ISRM International Symposium (Singapore - n. 19 in publication list). <u>*first author in research, but not presenter*</u>
06/2018:	Oral presentation at the 52 nd US Rock Mechanics Symposium 2018 (Seattle, WA, US - n. 21 in publication list).
10/2017:	Oral presentation at the ISRM International Symposium Afrirock 2017 (Cape Town, South Africa - n. 22 in publication list).
02/2013:	Oral presentation (in Italian) at the IX Convegno Nazionale dei Giovani Ricercatori di Geologia Applicata. (Naples, Italy - n. 25 in publication list).

INVITED RESEARCH AND PROFESSIONAL DEVELOPMENT SEMINARS

06/2022	"Tecniche di telerilevamento per la caratterizzazione preliminare di grandi frane in roccia". Workshop "L'innovazione tecnologica nella Geologia Applicata". Invited seminar (Bari, Italy).
07/2019:	"The characterization of slope damage using an integrated remote sensing- numerical modelling technique". Invited research seminar. University of Bologna (Bologna, Italy).
04/2017:	"Remote sensing investigation of a potential sackung, SW Hawkesbury Island, BC". Invited research seminar. Natural Resources Canada (Sidney, Canada).
03/2016:	"Remote sensing techniques for rock mass characterization". Invited professional development seminar. Association of Professional Engineers and Geoscientists of British Columbia (Vancouver, Canada).
06/2015:	"Characterising brittle fracture and kinematics in two large landslides. A combined numerical modelling-remote sensing approach". Invited research seminar. University of Bologna (Bologna, Italy).

5. EDUCATION

12/2009 – 12/2012:	M.Sc. in Geology and Land Management - Laurea Magistrale in Geologia e Territorio
	University of Bologna (Bologna, Italy)
	Final project title: "A structural investigation of the Hope Slide, BC, using terrestrial digital photogrammetry and rock mass characterization".
	Final mark: 110/110.
07/2011 - 01/2012:	Transatlantic Exchange Partnership (TEP) GeoNatHaz Summer School
	Simon Fraser University (Vancouver, Canada).
	Long-stay (5 months) summer school.
	Theme: natural hazards in mountainous regions.
09/2006 - 12/2009:	B.Sc. in Earth Sciences - Laurea Triennale in Scienze della Terra
	University of Bologna (Bologna, Italy)
	Final project title: "Rilevamento geologico della faglia di Cima Marana tra Campodalbero e Malga Porto di Sotto".
	Final mark: 100/110.

6. PROFESSIONAL EXPERIENCE

03/2014 - 07/2014:	Independent contractor at Studio ElleBi (Castenluovo del Garda, Italy)
	Main duties: Field activity (in-situ tests, geological survey, rock mass characterization), geological report compilation, GIS analyst, environmental geology.
03/2013 - 03/2014:	Independent contractor at Studio Nucci e Associati (Verona, Italy)
	Main duties: Field activity (in-situ tests, geological survey, rock mass characterization, mining consultancy), geological report compilation, GIS analyst.
06/2009:	Trainee at BBT-SE, Galleria di Base del Brennero, Brenner Basistunnel (Fortezza, Italy)

7. OTHER SERVICE AND INSTITUTIONAL ACTIVITIES

04/2019, 04/2018:

High school open days

Organization of activities and demonstrations for perspective students visiting the Department of Earth Sciences at the Simon Fraser University.

8. TECHNICAL SKILLS AND EXPERTISE

Field techniques:	Rock mass characterization; discontinuity mapping (spot, scanline, window mapping); rock mass classification; intact rock strength estimation (geological hammer, Schmidt hammer, Point Load testing); soil description; geological mapping; kinematic analysis.
Remote sensing:	Laser scanning, Digital Photogrammetry and Structure-from-Motion, Infrared thermography, Hyperspectral scanning.
Numerical Modelling:	Rocscience suite (RS2, WEDGE, SLIDE, DIPS), Itasca software (UDEC, 3DEC, Slope Model, FLAC, FLAC3D, Kubrix, Griddle), Elfen (Rockfield), Irazu (Geomechanica).
Other Software:	QGIS, ArcGIS (ESRI), RiScan Pro (Riegl), 3DM Analyst mapping suite (Adam Technology), AutoCAD (Autodesk), Rhinoceros (McNeel & Associates), Metashape (Agisoft), CloudCompare, MeshLab, Python.

9. LANGUAGE SKILLS AND CERTIFICATIONS

Italian:	Mother tongue
English:	Certification: TOEFL iBT. (Score: 103/120; test date: February 8 th , 2014).

10. PUBLICATIONS

PUBLICATIONS IN PEER-REVIEWED INTERNATIONAL JOURNALS

- 1. Mreyen, A.-S., <u>Donati, D.</u>, Elmo, D., Donze, F.V., and Havenith, H.-B. (2022). Dynamic numerical modelling of co-seismic landslides using the 3D distinct element method: Insights from the Balta rockslide (Romania). *Engineering Geology* 307, 106774.
- 2. Donati, D., Stead, D., Geertsema, M., Bendle, J.M., Menounos, B., and Borgatti, L. (2022). Kinematic analysis of the 2020 Elliot Creek landslide, British Columbia, using remote sensing data. *Frontiers in Earth Sciences* 10:916069
- 3. Muhammad, M., Williams-Jones, G., Stead, D., Tortini, D., Falorni, F., and <u>Donati, D.</u> (2022). Applications of image-based computer vision for remote surveillance of slope instability. *Frontiers in Earth Sciences* 10:909078.
- Geertsema, M., Menounos, B., Bullard, G., Carrivick, J.L., Clague, J., Dai, C., <u>Donati, D.</u>, Ekstrom, G., Jackson, J.M., Lynett, P., Pichierri, M., Pon, A., Shugar, D., Stead, D., Del Bel Belluz, J., Friele, P., Giesbrecht, I., Heathfield, D., Millard, T., Nasonova, S., Schaeffer, A.J., Ward, B.C., Blaney, D., Blaney, E., Brillon, C., Bunn, C., Floyd, W., Higman, B., Hughes, K. E., McInnes, W., Mukherjee, K., and Sharp, M.A. (2022). The 28 November 2020 landslide, tsunami, and outburst flood – a hazard cascade associated with rapid deglaciation at Elliot Creek, British Columbia, Canada. Geophysical Research Letters, 49, e2021GL096716.
- <u>Donati, D.</u>, Rabus, B., Engelbrecht, J, Stead D., Clague, J., and Francioni, M. (2021). A robust SAR speckle tracking workflow for measuring and interpreting the 3D surface displacement of landslides. *Remote Sensing*, 13(15), 3048.
- 6. <u>Donati, D.</u>, Stead D., Brideau M.-A., Ghirotti M. (2021). Using pre-failure and post-failure remote sensing data to constrain the three-dimensional numerical model of a large rock slope failure. *Landslides*, 18(3), 827-847.

- 7. <u>Donati, D.</u>, Westin, A., Stead, D., Clague, J., Stewart, T., Lawrence, M., and Marsh, J. (2021). A reinterpretation of the Downie Slide (British Columbia, Canada) based on slope damage characterization and subsurface data interpretation. *Landslides*, 18(5), 1561-1583.
- 8. <u>Donati, D.</u>, Stead, D., Stewart, T.W., and Marsh, J. (2020). Numerical modelling of slope damage in large, slowly moving rockslides: Insights from the Downie Slide, British Columbia, Canada. *Engineering Geology*, 273, 105693.
- 9. Zhao, K., Stead, D., Kang, H., Damjanac, B., <u>Donati, D.</u>, and Gao, F. (2020) Investigating the interaction of hydraulic fracture with pre-existing joints based on lattice spring modeling. *Computer and Geotechnics*, 122, 103534.
- 10. <u>Donati, D.</u>, Stead, D., Lato, M., and Gaib, S. (2020). Spatio-temporal characterization of slope damage: Insights from the Ten Mile Slide, British Columbia, Canada. *Landslides*, 17, 1037–1049.
- Stead, D., <u>Donati, D.</u>, Wolter, D., and Sturzenegger, M. (2019). Application of Remote Sensing to the Investigation of Rock Slopes: Experience Gained and Lessons Learned. *ISPRS Int. J. Geo-Inf.*, 8(7), 296.
 <u>*corresponding author for this publication*</u>
- 12. <u>Donati, D.</u>, Stead, D., Elmo, D., Borgatti, L. (2019). A preliminary investigation on the role of brittle fracture in the kinematics of the 2014 San Leo landslide. *Geosciences*, 9(6), 256.
- 13. Elmo, D., <u>Donati, D.</u>, Stead, D. (2018). Challenges in the characterisation of intact rock bridges in rock slopes. *Engineering Geology*, 245, 81-96.
- Huntley, D., Bobrowsky, P., Sawai, Y., Tanigawa, K., Goff, J., Chague-Goff, C., Stead, D. and <u>Donati, D.</u> (2017). Extending the terrestrial depositional record of marine geohazards in coastal northwest British Columbia. In: Lintern, D.G., Mosher, D.C., et al. (eds.). Subaqueous Mass Movements and Their Consequences: Assessing Geohazards, Environmental Implications and Economic Significance of Subaqueous Landslides. *Geological Society of London Special Publication*. 14 pp.

PUBLICATIONS IN PEER-REVIEWED CONFERENCE PROCEEDINGS

- <u>Donati, D.</u>, Stead, D., Francioni, M., Ghirotti, M., Margottini, C., and Borgatti, L. (2022). The characterization of slope damage at the Civita di Bagnoregio plateau using a remote sensing approach. In: Geotechnical Engineering for the Preservation of Monuments and Historic Sites, volume III. June 22nd-24th, 2022, Naples (Italy).
- Bar, N., Borgatti, L., <u>Donati, D.</u>, Francioni, M., Salvini, R., and Ghirotti, M. (2021) Classification of natural and engineered rock slopes using UAV photogrammetry for assessing stability. In: IOP Conference Series: Earth and Environmental Science. Mechanics and Rock Engineering, from Theory to Practice. September 20th-25th, 2021, Turin (Italy).
- <u>Donati, D.</u>, Stead, D., Elmo, D., and Onsel, E. (2020). New techniques for characterising damage in rock slopes: Implications for engineered slopes and open pit mines. In: International Symposium on Slope Stability in Open Pit Mining and Civil Engineering. May 12th-14th, 2020, Perth (Australia), 14 p.
- <u>Donati, D.</u>, Stead, D., and Onsel, E. (2019). Potential applications of multi-sensor remote sensing in rock mass characterization. In: International Congress in Rock Mechanics and Rock Engineering. September 13th-18th, Foz do Iguacu (Brazil), 8 p.
- <u>Donati, D.</u>, Stead, D., and Onsel, E. (2018). New approaches to characterize brittle fracture and damage in fractured rock masses. In: Proceedings of the ARMS10. 10th Asian Rock Mechanics Symposium – ISRM International Symposium for 2018. October 29th– November 3rd, 2018, Singapore, 9 p.
- Onsel, E., <u>Donati, D.</u>, Stead, D. and Chang, O. (2018). Applications of virtual and mixed reality in rock engineering. In: Proceedings of the 52nd US Rock Mechanics/Geomechanics Symposium. June 17th-20th, 2018, Seattle, WA, USA. Paper ARMA-2018-798.
- <u>Donati, D.</u>, Stead, D., Elmo, D., Karimi Sharif, L., Gao, F., Borgatti, L, and Spreafico, M. (2018). Experience gained in modelling brittle fracture in rock. In: Proceedings of the 52nd US Rock Mechanics/Geomechanics Symposium. June 17th-20th, 2018, Seattle, WA, USA. Paper ARMA-2018-821.
- 22. <u>Donati, D.</u>, Stead D., Brideau M.-A., and Ghirotti M. (2017). A remote sensing approach workflow for the derivation of numerical modelling input data: insights from the Hope Slide, Canada. In: 'Rock

Mechanics for Africa' – proceedings of AfriRock Conference - ISRM International Symposium 2017. October 2nd–7th, 2017, Cape Town, South Africa. Paper AR-47. 15 p.

- Sampaleanu, C., Stead, D., <u>Donati, D.</u>, Griffiths, C., D'Ambra, S., and LeBreton, R. (2017). Characterizing brittle fracture induced rockfall in an open sub-level retreat excavation. In: ARMA (ed.). 51st U.S. Rock Mechanics/Geomechanics Symposium. June 25th-28th, San Francisco, CA, USA. Paper ARMA-2017-0236.
- Sharma, J., Busler, J., Francioni, M., Stead, D., <u>Donati, D.</u>, Onsel, E., Clague, J.J., and Brideau, M.A. (2016). Monitoring landslides along pipeline corridors using a combined satellite-based InSAR and geomechanical modelling approach. In: 69th Canadian Geotechnical Conference. GeoVancouver 2016. October 2nd-5th October, Vancouver, Canada.
- 25. <u>Donati, D.</u>, Stead, D., Ghirotti, M., and Wolter, A. (2013). A structural investigation of the Hope Slide, British Columbia, using terrestrial photogrammetry and rock mass characterization. *Rendiconti Online della Società Geologica Italiana*, 24, 107-109.

CHAPTERS IN BOOKS

26. Stead, D., Donati, D., and Brideau M.-A. (2021). Rock slides and topples. *Treatise on Geomorphology* (*Second Edition*), Academic Press, Pages 114-136, ISBN 9780128182352.

OTHER PUBLICATIONS AND ABSTRACTS

- Donati, D., Stead, D., Rabus, B., Engelbrecht, J., Clague, J.J., Francioni, M., and Borgatti, L. (2022). Application of multi-sensor, multi-temporal, multi-scale remote sensing datasets for landslide analysis. SGI-SIMP joint congress "Geosciences for a sustainable future", September 18th-20th, Turin, Italy. Abstract 19-4.
- Francioni, M., <u>Donati, D.</u>, Chiacchio Gotardo, O., Lucente, C.C., and Borgatti, L. (2021). A comprehensive 3D geological model of the north-eastern sector of the San Leo plateau. VII Congresso Nazionale AIGA 2021, September 23rd-24th, Lecco, Italy.
- Geertsema, M., Menounous, B., Shugar, D., Millard, T., Ward, B., Ekstrom, G., Clague, J., Lynett, P., Carrivick, J., Friele, P., Schaeffer, A., <u>Donati, D.</u>, Stead, D., Jackson, J., Higman, B., Dai, C., Brillon, C., Heathfield, D., Bullard, G., Giesbrecht, I., Hughes, K., and Jacquemart, M. (2021). Terrestrial overview of a landslide-tsunami-flood cascade at Elliot Creek, British Columbia. 23rd EGU General Assembly, vEGU21, April 19th-30th, online conference. Abstract # EGU21-16599.
- Fullin, N., Ghirotti, M., <u>Donati, D.</u>, and Stead, D. (2021). Characterising the kinematics of the Joffre Peak landslides using a combined numerical modeling-remote sensing approach 23rd EGU General Assembly, vEGU21, April 19th-30th, online conference. Abstract # EGU21-154.
- <u>Donati, D.</u>, Stead, D. (2019). The importance of characterizing slope damage in rock slopes. American Geophysical Union, Fall Meeting 2019, December 3rd-9th, San Francisco, CA, US. Abstract #NH42A-01.
- Onsel, E., Chang, O., Mysiorek, J., <u>Donati, D.</u>, Zhao, K., Stead, D., Barnett, W.P., Zorzi, L., Shaban, A., Kang, H., and Gao, F. (2019). Applications of mixed and virtual reality techniques in engineering geology. American Geophysical Union, Fall Meeting 2019, December 3rd-9th, San Francisco, CA, US. Abstract #IN21B-17.
- Curran, M., Venditti, J., Menounos, B., Clague, J.J., Kwoll, E., <u>Donati, D.</u>, Stead, D., and Morell, K. (2019). Structural control of bedrock canyon alignment and morphology along the Fraser River, British Columbia, Canada. American Geophysical Union, Fall Meeting 2019, December 3rd-9th, San Francisco, CA, US. Abstract #EP53I-2254.
- Onsel, E., Chang, O., Mysiorek, J., <u>Donati, D.</u>, Stead, D., Barnett, W., and Zorzi, L. (2019). Applications of Mixed and Virtual Reality techniques in site characterization. Proceedings of the 26th Symposium of the Vancouver Geotechnical Society, May 31st, Vancouver, Canada.
- Westin, A., Donati, D., Stead, D., Clague, J., Stewart, T., and Lawrence, M. (2016). Characterization of large rockslides using an integrated approach. Proceedings of the CYGEGS Conference, September 29th-October 1st, Whistler, Canada.

GRADUATE THESES

- 36. <u>Donati, D.</u> (2020). The characterization of slope damage using an integrated remote sensingnumerical modelling approach. Ph.D. Thesis, Simon Fraser University, Vancouver, Canada.
- 37. <u>Donati, D.</u> (2012). A structural investigation of the Hope Slide, BC, using terrestrial digital photogrammetry and rock mass characterization. M.Sc. Thesis, Alma Mater Studiorum Università di Bologna, Bologna, Italy.