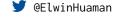
# Elwin Huaman, M.Sc.

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in http://www.linkedin.com/in/ElwinHuaman/

https://www.youtube.com/@ElwinHuaman/



I am a knowledge management consultant and researcher. My research interest is situated at the intersection of computer science and linguistics, that motivates me to focus on designing and implementing knowledge base ecosystems for the academia, industry, and under-represented communities. My work experience includes project management, research, teaching, and writing and monitoring funding proposals. Furthermore, I have published several articles and co-authored the book: *Knowledge Graphs: Methodology, Tools and Selected Use Cases.* Finally, I have supervised and facilitated projects, workshops, presentations, and discussions linked to knowledge graphs, under-represented communities, under-resourced languages, and media and information literacy.

### **Education**

- Ph.D. in Linguistics and Media Studies (ongoing). University of Innsbruck, Austria
  Topic: Building Knowledge Graphs for Under-resourced Languages
  I research the approaches for building knowledge graphs for under-resourced languages, that involves a holistic process of resource collection, creation, storing, curation, and deployment.
- Ph.D. in Computer Science (candidate) University of Innsbruck, Austria
  Topic: Knowledge Graph Curation
  I research semantic web technologies that can be used for assessing the quality of knowledge graphs, e.g., data modelling, ontologies, knowledge representation, and knowledge curation.
- M.Sc. in Web Engineering. University of Oviedo, Spain

  I specialized in Semantic Web technologies that can allow the representation, validation, and deployment of data on and off the web. Furthermore, I did research on semantic web, Linked Open Data, RDF, OWL, ontologies, dictionaries, web accessibility, and project management.
- M.Sc. in Digital Information Systems. University of Salamanca, Spain

  I focused on the direction and management of web projects for digital environments, as well as the description, representation, preservation, sustainability, and organization of open repositories. Also, I did my internship at the University of Salamanca's Document Repository.
- B.Sc. in Systems Engineering. National University of Altiplano Puno, Peru

  My interests were focused on implementing and optimizing complex systems, databases management, and content management systems (CMS). e.g., I developed a web system for managing students and teachers data of the National University of the Altiplano of Puno.

### **Experience**

- Project Manager, Quechua Voices, Wikimedia Foundation, Peru.

  Manage the design and execution of the recording of the voices of Puno Quechua speakers across different age groups, monitoring its progress, and evaluation of its results, that are uploaded on Wikimedia Commons, ensuring global accessibility.
- Data Consultant, Digital Science Center (DISC), University of Innsbruck, Austria.

  I assisted with the modelling and deployment of medieval mining text data. Also, I supported the assessment of data correctness for the TMMMT Project. The outcome enabled the identification of data modelling issues and prevented from representing inconsistent data.
- E-learning Developer, Wikimedia Foundation, Peru.

  I developed, implemented, and localized the "Reading Wikipedia in the Classroom" program for the Spanish-speaking user group in Peru. The blended program reached 40 professors, and it was translated to the native language: Quechua. I used the OpenEdX Learning Management System.

# **Experience (continued)**

2022: 09-12

**E-Learning Facilitator,** Wikimedia Foundation, **USA** (Remote).

I supported the development of e-learning programs such as "Training of Trainers". The program hosted +20 participants from different countries and I assisted its smooth implementation and assessment. Furthermore, I created e-learning materials to present complex concepts of the free knowledge ecosystem to non-expert audiences.

2019 - 2022

Lecturer, Computer Science Department, Innsbruck University, Austria.

I taught various groundbreaking subjects, such as i) Knowledge Graphs, ii) Advance Topics in Computer Science, iii) Online Communication and Marketing, iv) Smart Data, and v) Programming Methodology.

2018 - 2022

Research Assistant, Semantic Technology Institute, University of Innsbruck, Austria. I developed and implemented data management strategies, e.g., a data curation framework was proposed in order to assess the quality of data. The outcome highlighted the tasks; assessment, cleaning, and enrichment. Also, I coordinated the MindLab and WordLiftNG projects, and co-wrote the book "Knowledge Graphs: Methodologies, Tools, and Selected Use Cases".

2015 - 2017

Lecturer. Research Center of the National University of Altiplano, Puno, Peru. Task: Training teachers in research areas, and use of technologies such as Mendeley (Bibliographic References Manager), SigmaPlot (Data analysis), and DSpace (Repository of data).

## Languages

Quechua Native

Spanish Native

English (C1) Professional working proficiency

German (B1) Limited working proficiency

Italian (B1) Limited working proficiency

### Skills

### Hard skills

Coding Java, Python, PHP, CSS, CMS, HTML, JavaScript, LTEX, Markdown.

Databases GraphDB, MySQL, SPARQL, Wikibase.

Software | Jira, JupyterLab, Moodle, OpenEdx, OpenOLAT, Wikibase, Wikidata, WordPress

E-Learning Articulate Storyline 360, Figma, Camtasia, Moodle, OBS Studio, Teams, Zoom, Webex

Soft skills

Personal Creative thinking, flexibility, initiative, intercultural competence, leadership.

Interpersonal Digital literacy, facilitation, mentorship, public speaking, time management.

Hobbies. | Board games, Chess, Volleyball, Hiking, Mountain Biking, Swimming.

# Miscellaneous Experience

#### Awards, Achievements, and Grants

Scholarship, Wikimedia Foundation for supporting technical contributor to Wikimedia projects, and allow them to attend the Wikimedia Hackathon 19–21 May, Greece

Grant, University of Innsbruck for attending the AURORA Summer School on Public Outreach for selected PhD candidates, from 5 to 8 June, Iceland

# Miscellaneous Experience (continued)

- Grant, North American Chapter of the Association for Computational Linguistics (NAACL) for presenting outstanding papers on the SIMBig Conference, 16-18 Nov, Peru
  - **Grant**, Wikimedia Foundation for implementing the Reading Wikipedia in the Classroom program (Bringing Wiki project to the Andes), **USA**
  - **Grant**, Postdocs to Innovators (p2i) for following an entrepreneurial training course in topics like launching a business, being innovative in industry and academia, **France**
  - **Science Slam Winner**, Preserving human knowledge through knowledge graphs by Elwin Huaman, *ScienceSlam2022*, Innsbruck, **Austria**. Read more: www.scienceslam.at
  - **Best Project Award**, 4th Summer Datathon on Linguistic Linked Open Data (SD-LLOD-22): Dictionary LODification using Wikibase: Quechua language, SD-LLOD-22, Cercedilla, **Spain**. Read more: https://datathon2022.linkeddata.es/
  - **First Prize**, ICTs for Indigenous Languages Hackathon as part of the World Summit on the Information Society (WSIS 2022), *UNESCO*, **France**. https://bit.ly/WSIS-winner
- Best Paper Award, Knowledge Graphs and Semantic Web Conference (KGSWC2021): Towards Knowledge Graphs Validation through Weighted Knowledge Sources, KGSWC2021, Online, Thailand
- Finalists phase, Aporta Challenge 2019: Ideas competition, Ministry of Economy and Business, Spain. See more: https://bit.ly/aporta-2019
  - Grant, 1669 Reise- und Forschungsstipendien for attending Wikimania 2019, Austria
- First Prize, Smart Destinations hackathon (Hack4SD), World Tourism Organization (UNWTO), Spain . Read more: https://youtu.be/roUrLgHZtWQ
- First Prize, University Contest of Talent and Entrepreneurship (CHAMP-U), *University of Oviedo*, Spain

### **Participation**

- Global Dialogues: Indigenous Data Sovereignty. Sponsored by Stanford Global Studies Division ( Ink), Stanford
  - **Language rights: international perspectives**. Sponsored by *Endangered Languages Project* ( **𝚱** link), **ELP**
  - Indigenous Languages of the Americas Colloquium Series. Sponsored by the University of Utah ( on link), Utah
  - Reducing indigenous inequalities: Contextualizing strategies and policies for achieving community empowerment in different global regions. Sponsored by the Worldwide Universities Network: Webinar series ( link), WUN
  - Creating a World that Sustains its Languages. Sponsored by the Charles Darwin University ( link), Charles Darwin University
- MOOC introductory course in Quechua: teaching grammar in immersion. Produced by the Institut National des Langues et Civilisations Orientales ( link), INALCO
  - 5th Summer Datathon on Linguistic Linked Open Data (SD-LLOD-23). Sponsored by the European Cooperation in Science and Technology ( link), NexusLinguarium

### **Selected Projects**

2023

2024|01-06 Coordinator, QuechuaVoices: It has the goal to train quechua speakers on the use of tools to record their voices. It helps to document the quechua language and knowledge.

Coordinator, WikiAndes: It aims to bring Wiki projects to the Andes. It helps teachers and students in the Andes (e.g. Peru) achieve their learning objectives, for instance, developing media and information literate citizens. See: https://bit.ly/WikiAndes

# Miscellaneous Experience (continued)

**Coordinator**, Qichwabase: It is the Quechua language Knowledge Graph project. 2022 - · · · · Brings together researchers and Quechua language enthusiasts with the aim of preserving Quechua knowledge, and developing technology for Quechua communities. **Instructor**, Science Clubs in Quechua: We develop in a collaborative and multidisci-2021 - 2022 plinary way the use of the Quechua language for the dissemination of different areas of scientific knowledge. See more: http://clubesdecienciaperu.org/project/cdec54/ **Documentary**, Wikipedia – Die Schwarmoffensive: It explains the possibilities and lim-2020 - 2021 its of Wikipedia through conversations with Wikipedia activists, and those who are critical of it. See: https://www.dw.com/de/wikipedia-die-schwarmoffensive/av-61988535 **Researcher**, WordLift NG project: Develops a new platform to deliver Agentive SEO technology to any website. See more: https://wordlift.io/ng/ Founder, QUIPU [Quechua Language-based Knowledge Graph]: Aims to preserve 2019 - 2022 Quechua knowledge in a structured format. See: https://bit.ly/QUIPUApproach

### Certification

2019 - 2020

- (to enroll) **UBCx: Reconciliation Through Indigenous Education**. Conducted by UBC: the University of British Columbia (edx.org)
  - (ongoing) Indigenous language: From policy and planning to implementation and assessment. Conducted by UBC: the University of British Columbia (edx.org)

Researcher, MindLab project: Develops methods and software tools for modelling and

implementing scalability for knowledge graphs. See more: https://mindlab.ai/

- Universality, diversity and idiosyncrasy in language technology. ( UniDive)
- Language Documentation Training Webinars. Awarded by ELP: the Endangered Languages Project and Language Documentation Training Center
  - Language Revival: Securing the Future of Endangered Languages. Awarded by The University of Adelaide (AdelaideX Langioix)
  - An Introduction to Applied Linguistics and TESOL. Awarded by The University of Leicester (futurelearn.com)
  - Miracles of Human Language: An Introduction to Linguistics. Awarded by The University of Leiden & Meertens instituut (KNAW) (coursera.org)
  - **IBM Data Privacy for Information Architecture**. Awarded by IBM: The International Business Machines Corporation (coursera.org)
  - Introduction to Data Strategy, Management, and Governance. Awarded by The IE University, School of Science and Technology (edx.org)
  - **StudioX: Creating a Course with edX Studio**. Awarded by edX StudioX (edx.org)
- 2022 **Reading Wikipedia in the Classroom Trainers**. Awarded by Wikimedia Foundation
  - Wikibase and Semantic MediaWiki for data-driven semantics. Awarded by the European Commission
- 2016 Mendeley Advisor: Reference Management Software. Awarded by ELSEVIER
- Introduction to Linked Data and the Semantic Web (Online course). Awarded by the University of Southampton
- The Semantic Web: Tools for effective information publishing and extraction on the Web (Online course). Awarded by the Pontifical Catholic University of Chile
- XV Conference on Information Management: The challenge of digital content.

  Awarded by Spanish Association of Documentation and Information (SEDIC)

## **International Activity**

#### **Talks**

2024

- **Presenter**: What are Knowledge Graphs and how they can support Under-Resourced Languages, at the Language Documentation and Archiving Conference 2024, Sept 07, Berlin, **Germany**
- Invited Speaker (Round table): Supporting minority languages and Wikimedia community, at the International Wikimania Conference, Aug 09, Katowice, **Poland**
- Invited Speaker: Knowledge Graphs and Under-Resourced Languages, at the National University of the Altiplano of Puno, Jun 02, Puno, Peru
- **Invited Speaker**: Connecting Alpacas to their Roots: A Quechua Experience, at the 1st Colloquium on Alpacas in Peru: Bridging Threads of Science and Culture, Mar 07, Vienna, **Austria**

2023

- Invited Speaker: When Knowledge Graphs meet Low Resource Languages, at the 3rd International Conference on Systems Engineering (COINSI 2023), Dec 13-15, Puno, Peru
- **Presenter**: How Wikipedia, the largest internet encyclopedia, fosters digital education within academia and beyond?, at the CZEDUCON 2023, Nov 21-23, Brno, Czech Republic
- Invited speaker: First Wikibase Lexical Data Workshop (Wikibase-Lex), at the 4th Conference on Language, Data and Knowledge (LDK 2023), Sept 13, Vienna, Austria
- **Presenter**: A Quechua Language and Knowledge Base for Quechua Communities, at the 7th Meeting of Peruvian Scientists in Europe (SINAPSIS), July 13-15, Geneva, **Switzerland**
- **Presenter**: *Pedagogy in crisis: Support for teachers in Peru*, at the EduWiki Conference 2023, May 26-28, Belgrade, **Serbia**
- **Presenter**: *Bringing Wikiprojects to the Andes (WikiAndes)*, at the Conference on Minority Languages and Digital Solutions (ContribuLing 2023), May 12, Paris, **France**
- **Invited speaker**: *Political Crisis in Peru: A Roundtable Discussion*, at the University College London (UCL), March 13, Online, **London**.

2022

- **Presenter**: When Quechua meets Wikibase, at The 2022 Wikimania Conference: The Festival Edition, August 11–14, **Online**
- **Presenter**: *Getting Quechua Closer to Final Users through Knowledge Graphs*, at The 9th International Conference on Information Management and Big Data (SIMBig 2022), Nov 16-18, **Peru**
- Invited speaker: Qichwabase as a Wikibase instance, at the Wikibase community user group (Wikibase), Online, Germany
- Invited speaker: Publishing Structured Quechua Knowledge (Qichwabase), at the Science Clubs in Quechua, Online, Peru

2021

- **Presenter**: *Knowledge Graph Curation: A Practical Framework*, at the International Joint Conference on Knowledge Graphs (IJCKG2021), Online, **Thailand**
- **Presenter**: Towards Knowledge Graphs Validation through Weighted Knowledge Sources, at the Knowledge Graphs and Semantic Web (KGSWC 2021) Conference, **USA**
- **Invited speaker**: *Knowledge Graphs: Past, Present, and Future,* at the COPABISI 2021 Conference, National University of the Altiplano of Puno, **Peru**
- **Invited speaker**: *Towards an Ecology of Knowledge*, at the YACHANA 2021 event, National University of the Altiplano of Puno, **Peru**

2020

**Invited speaker**: *Knowledge Graph basado en el idioma Quechua*, at the COPAISI 2020 Conference, National University of the Altiplano of Puno, **Peru** 

2019

**Presenter**: QUIPU: Quechua Language based Knowledge Graph, at the Wikimedia 2019 Conference, University of Stockholm, **Sweden** 

# **International Activity (continued)**

#### **Reviewer tasks**

- 2022 **Subreviewer**: Semantics and Knowledge track, at the Web Conference (TheWebConf2022), Online, **France**
- Subreviewer, at the Knowledge Graphs and Semantic Web (KGSWC2021) Conference, USA
- Subreviewer, at the 12th International Conference on Knowledge Science, Engineering and Management (KSEM2019), Greece
  - **Subreviewer**, at the 12th International A.P. Ershov Informatics Conference (PSI2019), **Russia**

#### Collaborative events

- Organizer: Wikipedia as a tool for students' collaborative learning in the classroom, at the UGEL Melgar (Melgar Local Educational Management Unit). Online, **Peru** 
  - Organizer: Reading Wikipedia in the Classroom, at the National University of the Altiplano of Puno, Peru
- Organizer: Quechua Wikipedia Editathon, at the Science Clubs in Quechua, Online, Peru
- - Organizer: Workshop on Digital Publishing in Quechua Language, at the Science Clubs in Quechua, Online, Peru

### **Research Publications**

### **Books and Chapters**

Fensel, D., Simsek, U., Angele, K., **Huaman**, E., Kärle, E., Panasiuk, O., ... Wahler, A. (2020). *Knowledge graphs - methodology, tools and selected use cases.* 6 doi:10.1007/978-3-030-37439-6

### **Conference Proceedings**

- Huaman, E., Lindemann, D., Caruso, V., & Huaman, J. L. (2023). QICHWABASE: A quechua language and knowledge base for quechua communities. In *Toth 2023: Terminology & ontology: Theories and applications june 1–2, chambery, france, 2023,* arXiv. Retrieved from http://toth.condillac.org/
- **Huaman**, E., & Fensel, D. (2021). Knowledge graph curation: A practical framework. In *Ijckg'21: The 10th international joint conference on knowledge graphs, virtual event, thailand, december 6 8, 2021 (pp. 166–171).

  doi:10.1145/3502223.3502247*
- Huaman, E., Tauqeer, A., & Fensel, A. (2021). Towards knowledge graphs validation through weighted knowledge sources. In Knowledge graphs and semantic web third iberoamerican conference and second indo-american conference, KGSWC 2021, kingsville, texas, usa, november 22-24, 2021, proceedings (Vol. 1459, pp. 47–60). Odoi:10.1007/978-3-030-91305-2\\_4

### **Journal Articles**

- Simsek, U., Kärle, E., Angele, K., **Huaman**, **E.**, Opdenplatz, J., Sommer, D., ... Fensel, D. (2023). A knowledge graph perspective on knowledge engineering. *SN Computer Science*, 4(1), 16. 6 doi:10.1007/s42979-022-01429-x
- Aghaei, S., Angele, K., **Huaman**, E., Bushati, G., Schiestl, M., & Fensel, A. (2022). Interactive search on the web: The story so far. *Information*, 13(7), 324. Ø doi:10.3390/info13070324
- **Huaman**, E. (2022). Steps to knowledge graphs quality assessment. CoRR, abs/2208.07779. **6** doi:10. 48550/arXiv.2208.07779. arXiv: 2208.07779

- **Huaman**, E., Huaman, J. L., & Huaman, W. (2022). Getting quechua closer to final users through knowledge graphs. *CoRR*, *abs/2208.12608*. Ø doi:10.48550/arXiv.2208.12608. arXiv: 2208.12608
- Angele, K., Fensel, D., **Huaman**, **E.**, Kärle, E., Panasiuk, O., Şimşek, U., ... Wahler, A. (2020). Semantic web empowered e-tourism. *Handbook of e-Tourism*, 1–46.
- **Huaman**, E., Kärle, E., & Fensel, D. (2020a). Duplication detection in knowledge graphs: Literature and tools. *CoRR*, *abs/2004.08257*. arXiv: 2004.08257. Retrieved from *Ohttps://arxiv.org/abs/2004.08257*
- **Huaman**, E., Kärle, E., & Fensel, D. (2020b). Knowledge graph validation. *CoRR*, *abs*/2005.01389. arXiv: 2005.01389. Retrieved from 𝚱 https://arxiv.org/abs/2005.01389