

# Philip Tovstogan

## Curriculum Vitae

✉ [phil.tgun@gmail.com](mailto:phil.tgun@gmail.com)  
🌐 [philtgun.me](http://philtgun.me)  
🎓 Philip Tovstogan  
🔗 [philtgun](#)  
📄 [in philtgun](#)  
📍 Barcelona, Spain

### Education

- 2018–2022 **Ph.D. (in-progress)**, *Music Technology Group, Universitat Pompeu Fabra*, Barcelona, Spain.  
Supervisors: Xavier Serra, Dmitry Bogdanov  
Thesis: Exploration of Music Collections with Audio Embeddings
- 2017–2018 **M.S.**, *Sound an Music Computing, Universitat Pompeu Fabra*, Barcelona, Spain, Grade: 9.0/10.  
Supervisors: Dmitry Bogdanov, Alastair Porter  
Thesis: Exploring Music Similarity with AcousticBrainz
- 2012–2015 **M.S.**, *Electrical Engineering and Computer Science International Graduate Program, National Yang Ming Chiao Tung University*, Hsinchu, Taiwan, Grade: 90.1/100.  
Supervisor: Hsu-Feng Hsiao  
Thesis: Optimization of Video Streaming Using Video Quality Estimation and LMRC Channel Coding
- 2008–2012 **B.S.**, *Computer Science, Multimedia & Network Engineering Program, National Yang Ming Chiao Tung University*, Hsinchu, Taiwan, Grade: 90.2/100.

### Skills

- Knowledge Deep learning, software engineering, music auto-tagging models, recommendation systems, user-centric evaluation, audio signal processing, system design
- Tech Python, PyTorch (Lightning), Git, Linux, Docker, Flask, REST API, AWS, PostgreSQL, FastAPI, GitHub Actions, Google Cloud, JS

### Work Experience

- 2021 **Researcher**, *Jamendo*, Luxembourg, (internship).  
◦ Track-to-track music recommendations based on music embeddings
- 2018–2021 **Predoctoral researcher**, *Music Technology Group, Universitat Pompeu Fabra*, Barcelona, Spain.
- 2018 **Software Developer**, *Music Technology Group, Universitat Pompeu Fabra*, Barcelona, Spain, (internship).  
◦ [Freesound.org](https://freesound.org): bugfixes and new features
- 2017 **Software Developer**, *LyraVR*, Taipei, Taiwan.  
◦ Cross-platform support: HTC Vive, Oculus Rift
- 2016–2017 **R&D Engineer**, *Bovia*, Zhubei, Taiwan.  
◦ Implementation of Flask-Restful API to control linux system configuration  
◦ R&D of CI pipeline for firmware building for multiple embedded platforms  
◦ Establishing startup infrastructure, system administration and support

- 2014–2016 **Software Developer**, *Information and Communications Research Laboratories, Industrial Technology Research Institute*, Hsinchu, Taiwan.
  - R&D of various projects based on BeagleBone Black
- 2012–2014 **Research and Teaching Assistant**, *Network and Information Processing Lab, National Yang Ming Chiao Tung University*, Hsinchu, Taiwan.
- 2011–2012 **Software Developer**, *ChangingTec*, Hsinchu, Taiwan, (internship).

---

## Publications (selected)

- 2021 **MediaEval 2021: Emotion and Theme Recognition in Music using Jamendo.** Tovstogan, P., Bogdanov, D., and Porter, A. *Working Notes Proceedings of the MediaEval 2021 Workshop*, Online
- 2020 **Web Interface for Exploration of Latent and Tag Spaces in Music Auto-Tagging.** Tovstogan P., Serra X., and Bogdanov D. *Machine Learning for Media Discovery Workshop (ML4MD), International Conference on Machine Learning (ICML)*, Vienna, Austria
- 2019 **The MTG-Jamendo Dataset for Automatic Music Tagging.** Bogdanov, D., Won M., Tovstogan P., Porter A., and Serra X. *Machine Learning for Music Discovery Workshop (ML4MD), International Conference on Machine Learning (ICML)*, Long Beach, CA, United States

---

## Awards and Honors (selected)

- 2018–2021 Marie Skłodowska-Curie Fellowship (MIP-Frontiers)
  - 2018 Best Project for Music Streaming Services from HAMR@ISMIR2018
- 2009–2013 Golden Bamboo Scholarship (average grade > 85/100, 8 semesters)
- 2009–2012 Academic Achievement Award (top 3 students, 4 semesters)
- 2012 Outstanding New Student Scholarship (1 semester)

---

## Other relevant experience

- 2020–2021 Reviewer for International Society in Music Information Retrieval (ISMIR) conference
- 2019–2021 Member of organizing team of *Emotions and Themes in Music* task within Multimedia Benchmarking Initiative (MediaEval)
- 2021 Papers chair and member of organizing committee for Web Audio Conference (WAC)

---

## Languages

Ukrainian	<b>Native</b>	
Russian	<b>Native</b>	
English	<b>Fluent</b>	<i>TOEFL 113 iBT @ 2013</i>
Spanish	<b>Advanced</b>	<i>Con conversationally fluent</i>
Mandarin	<b>Intermediate</b>	<i>Professional capability</i>