**Yun-Ning(Amy) Hung**

[Email: biboamybibo@gmail.com](mailto:biboamybibo@gmail.com), [Github: biboamy](https://github.com/biboamy/)

[Web: https://biboamy.github.io/amyhung](https://biboamy.github.io/amyhung/), [Linkedin: yun-ning-hung](https://www.linkedin.com/in/yun-ning-hung/)

|  |
| --- |
| I am currently a research assistance at Academia Sinica, Taipei, Taiwan. I apply machine learning to Music Information Retrieval. I am also a App/web developer and amateur instrument player. |

|  |  |
| --- | --- |
| **Education** |  |
| 2012 Aug. - 2016 Jun | B. S. in **Electrical Engineering** (GPA 3.764/4.0)  National Cheng Kung University, Taiwan |
| 2014 Aug. - 2014 Dec | UW Madison Exchange Program (GPA 3.67/4.0)  University of Wisconsin Madison, US |

|  |  |
| --- | --- |
| **Work Experience** |  |
| 2017 Sep. - present | **Research Assistant** in Research Center for IT Innovation, Academia Sinica, working on applying machine learning algorithm to Music Information Retrieval(MIR) |
| 2016 Apr. - 2017 Jun | **App and Web developer** in Adv.Media. Creating interactive multimedia application via AR/VR/MR technology |
| 2014 Aug. - 2015 Aug. | **Web developer** in edü·elf, a student startup company based in Tainan, Taiwan. Working on developing exam analysis system for high school teachers |
| 2014 Jan. - 2016 Aug. | **Personnel tutor** teaching junior/senior high school math and science  Tzu Chi Senior High School guitar **club mentor** |
| 2014 Jul. - 2014 Aug. | **Activities PR Personnel** in social welfare organization for immigrants and foreigners. Working on organizing activities and website management |

|  |  |
| --- | --- |
| Project |  |
| 2017 Step. – present | **Music Auto-tagging**, advised by [Dr. Yi-Hsuan Yang](http://mac.citi.sinica.edu.tw/~yang/), director of Music and AI Lab at Academia Sinica.   * **Instrument recognition** – research on deep learning model to handle music harmonic structure; implemented it to do frame-level tagging for polyphonic music [1] * **Music genre tagging** – research on deep learning structure for music genre and subgenre tagging * **Music emotion tagging** – research on cross domain (audio and symbolic) tagging and apply the tagging result to conditional symbolic drum generation |
| 2018 May. - present | **Music Streaming,** the extended project of instrument recognition. Research on polyphonic music auto-transcription |
| 2016 Feb. - 2016 Jun. | The sound of summer, an **conductive silver ink painting** presents at NCKU Art Festival, which enables audiences to explore sound effect through touching the painting |
| 2015 Sep. - 2015 Dec. | **Ticket Exchange System,** student project done in course “CS506 – Software Engineering” given by Prof. [Peter Ohmann](http://pages.cs.wisc.edu/~ohmann/teaching.html) at UW-Madison.   * Developed a mobile platform for students to sell, buy or bid tickets for sport events. |
| 2014 Feb. - 2014 Jun. | **Homework Discussion Social Media**, student project done in course “Web Programming” given by Prof. [Chang Tien-Hao](https://researchoutput.ncku.edu.tw/en/persons/tien-hao-chang) at NCKU.   * Developed social platform for students to exchange their notes, homework or publications |
|  |  |

|  |  |
| --- | --- |
| **Publication** |  |
| [1] Yun-Ning Hung and Yi-Hsuan Yang, “Frame-level Instrument Recognition by Timbre and Pitch”,  in Proceeding of the 19th International Society for Music Information Retrieval Conference  (ISMIR), Sep. 2018  [2] Lang-Chi Yu, Yi-Hsuan Yang, Yun-Ning Hung, Yi-An Chen, “Hit Song Prediction for Pop Music by  Siamese CNN with Ranking Loss” in arXiv preprint arXiv:1710.10814, Oct. 2017 | |
|  | |

|  |  |
| --- | --- |
| **Academic Award** |  |
| 2018 | WRMIR Travel Grant for ISMIR 2018 |
| 2015 Fall | Scholarships for Excellent Students to Study Abroad |
| 2015 Spring | Honorable Mention in Campus App Creativity Competition |
| 2013 Aug. - 2014 Jun. | Academic Excellence Award (For the top 10% students in the class) |
| 2012 Sep. - 2016 Jun | Taipei Association of Medical Technologists Award |

|  |  |
| --- | --- |
| **Skill** |  |
| Language | Mandarin(mother tongue), English(Fluent), Spanish (Familiar) |
| Technical Skills | **Programming**: Python, C#, PyTorch, Git  **Web**: HTML, CSS, Javascript, PHP-SQL  **Instrument**: Piano, Flute, Guitar, Harmonica |

*(please visit my website for more details:* [*https://biboamy.github.io/amyhung/)*](https://biboamy.github.io/amyhung/))

|  |  |
| --- | --- |
| **Other Experience** |  |
| 2015 Jun. - 2016 Jun | Student ambassador and Chinese tutor for Foreign students in NCKU |
| 2014 Spring | Resident performer in Imagine Caf’e, Tainan, Taiwan |
| 2014 Spring | Win the second place in the 17th South Acoustic Song Competition |
| 2014 Spring | Win the third place in the 34th NCKU Folk Song Competition |
| 2014 Winter | Win the sixth place in the song writing competition, 15th South Guitar Cup |
| 2014 Aug. - 2015 Jan  2013 Jan. - 2014 Jan. | Vice president of NCKU Guitar Club  Volunteer in Caring Club and Elder Protection Center |
|  |  |
|  |  |