
EDUCATION

Taipei, TW **National Taiwan University** **Sep 2018 – Jun 2020**

- M.Sc. in Networking and Multimedia, Dept. of Computer Science and Info. Engineering, GPA: 4.16

Taipei, TW **National Chengchi University** **Sep 2014 – Jun 2018**

- B.Sc. in Digital Technologies & Contents (double major) and B.A. in English, GPA: 3.99

ACADEMIC EXPERIENCE

Research Assistant **Human-Computer Interaction Lab @ CSIE, NTU** **Jul 2018 – Jul 2020**

- Published **3 top conference full papers** on wearable haptics in VR:
 - **HeadBlaster, ACM SIGGRAPH '20 Technical Paper** (**1st author**, presenter), doi.org/10.1145/3386569.3392482. Built the software/hardware prototype; designed, implemented and conducted 5 experiments; analyzed data; drafted and revised the paper. [C#, Unity, Arduino, Python]
 - **WalkingVibe, ACM CHI '20 Paper** (3rd author), doi.org/10.1145/3313831.3376847. Designed the experiment; built the VR application for user study; assisted in 240-person study. [C#, Unity]
 - **PhantomLegs, IEEE VR '19 Paper** (**1st author**, presenter), doi.org/10.1109/VR.2019.8798158. Built the software/hardware prototype; designed, implemented and conducted the experiment; analyzed data; drafted and revised the paper. [C#, Unity, Arduino]

Research Assistant **Innovative User Interface Lab @ CS, NCCU** **Jan 2017 – Jul 2018**

- Built a wearable GearVR app that enables user to compose music with gesture in collab. with Samsung.
- Assisted in constructing an online guideline website of UI design in VR.

TECHNICAL EXPERIENCE

*more available at rarakasm.com/portfolio

Coursework

- **Computer Gaming Theory**. Built an AI agent for Chinese Chess using advanced alpha-beta pruning algorithm; ranked #4/30 in final AI tournament. [C++, C]
- **Software Engineering**. Practiced through the process of SWE from drafting software requirement/design documents, project planning to implementation, integration and testing. Responsible for front-end development. [Java, JavaScript, Spring Boot, React.js, Tomcat, Jenkins, JUnit]
- **Game Programming**. Developed a 2-player top-down shooter game with modular weapon/skill customization; won the Technical Award on final cross-campus competition. [C++, Unreal]
- **Advanced Human-Computer Interaction, Computer Graphics, Web Programming, App. of Database.**

Other projects

- **BetterOf** (2018). Android app prototype for discovering cosmetic products where users can share ratings and comments. Built for a commercial UI/UX contest with 3 UX designers. [Java, Android, Firebase]
- **Plasma Pursuit** (2017). Capstone project. A Kinect-based rhythm game built in Unity, with database integration for tracking/querying score records across 5-day exhibition. [C#, Unity, MySQL]

ADDITIONAL EXPERIENCE

- **Teaching Assistant @ Introduction to Programming**, NCCU (2017). Led a group of 6 TAs; designed 6 programming assignments in Processing; maintained the web platform for assignment peer-review [Vue.js, Node.js, Parse]; provided assistance to ~170 students.
- **Teaching Assistant @ Creative Programming**, NTUST (2019). Designed a few in-class exercises; guided ~60 students through exercises, assignments and debugging as the only TA.
- **Leader, Lecturer @ Digital Music Composition Club**, NCCU (2015 – 2017). Taught members to compose digital music using Ableton Live and to perform as DJs; held an open party with 100+ people.

LANGUAGES AND TECHNOLOGIES

*in rough order of proficiency

- C#, C++, Processing, JavaScript/HTML/CSS, Java, C, Python, GLSL, SQL
- Unity Engine, Unreal Engine, React.js, Firebase, Vue.js, Node.js, Android, ASP.NET