Pascal Chiu | CV Resume
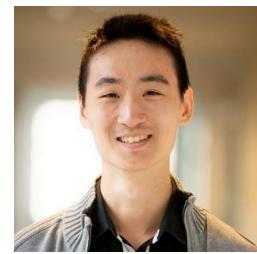
❯ Status : Engineering Student, Research Graduate

❯ Fields : Computer & Information Sciences, UI, VR/AR, Interaction Design, HCI

❯ Affiliations : INSA de Lyon : Dept. of Computer Sciences - Tohoku University : GSIS

⟩⟩⟩ Experience

2018	**IT Company Internship (4 months)**	Mobile Devices Ingénierie

❯ Intelligence-based client management tool development using data mining & machine learning
❯ Ruby on Rails, Python, R, PostgreSQL, **Docker**, kubernetes, **git**, Agile development

2017	**Laboratory Internship (2 months)**	LIRIS

❯ Algorithm design & evaluation for aggregating queries on distributed graph databases
❯ **Big Data**, Semantic Web, AI, **Advanced Algorithmics**, Benchmarking, **C/C++**

2016	**Student Project Manager (6 months)**	INSA de Lyon

❯ Design & Development Industrial project for INSA Robotics and Mecatronics (13 ppl)
❯ **Team & Project Management**, Industrial Design & Drawing, Assembly, Arduino

⟩⟩⟩ Education

2018 - Present	**Master Course under Double Degree (2.5 years / Sendai, Japan)**	Tohoku University

❯ Graduate School of Information Sciences, Information Systems Department
❯ Research Laboratory : **Interactive Content Design**, Publications at ACM SUI, SIGGRAPH
❯ Research Field : HCI, **UI/UX**, Interaction Design, VR, **Computer Vision**, Deep Learning

2014 - Present	**M.Eng. majoring in Computer Science Engineering (Lyon, France)**	INSA de Lyon

❯ Core classes incl. Algorithmics, **Image rendering**, Systems Engineering, **AI**, Data Mining
❯ Specialisation in AI tools : Neural Networks, Pathfinding, Procedural generation, GOAP …

2012	**Scientific Program with English specialisation (Cambridge, UK)**	St. Andrew's College

❯ Intensive courses undertaken with various science subjects taught in English

⟩⟩⟩ Professional Skills

Languages

❯ Chinese	Mother tongue, practice since childhood
❯ French	Second native language
❯ English	Fluently written and spoken Cambridge FCE (ESOL), **TOEIC 990**
❯ Japanese	Intermediate level written and spoken
❯ Spanish	Intermediate level written and spoken

Technical Skills

❯ Coding Essentials : **C/C++**, C#, Java, **Python**, PHP
❯ Front : Javascript, JSON, XML, HTML, RDF, JQuery
❯ HCI : Unity, VR/AR, Interaction Design, Prototyping
❯ Creation : Design (Adobe CC Suite, SAI, Clip Studio) 3D and Rendering (SketchUp, Kerkythea)

⟩⟩⟩ Hobbies & Interests

❯ Piano Jazz : Practiced bewteen 2008 and 2014
❯ Illustration : Digital Painting, Character Design

❯ Game Dev : Scripting, **Engine & Tool Coding** :
Unity (C#), C/C++ (SDL), Java (Slick/LWJGL, **OpenGL**)

Research Appendix

⟫⟫ Publications

Nov. 2019	**ACM SA '19: SIGGRAPH Asia (XR Demonstration + Talk)**

❱ Pascal Chiu, Isamu Endo, Kazuki Takashima, Kazuyuki Fujita, and Yoshifumi Kitamura. 2019. **FreeMo: Extending Hand Tracking Experiences Through Capture Volume and User Freedom**. In SIGGRAPH Asia 2019 XR (SA '19). Association for Computing Machinery, New York, NY, USA, 11–12.

❱ **DOI** https://doi.org/10.1145/3355355.3361882

Oct. 2019	**ACM SUI '19: Symposium on Spatial User Interaction (Short Paper)**

❱ Pascal Chiu, Kazuki Takashima, Kazuyuki Fujita, and Yoshifumi Kitamura. 2019. **Pursuit Sensing: Extending Hand Tracking Space in Mobile VR Applications**. In Symposium on Spatial User Interaction (SUI '19). Association for Computing Machinery, New York, NY, USA, Article 1, 1–5.

❱ **DOI** https://doi.org/10.1145/3357251.3357578

Jul. 2019	**ACM SIGGRAPH '19 (Poster Presentation)**

❱ Maria Mannone, Eri Kitamura, Jiawei Huang, Ryo Sugawara, Pascal Chiu, and Yoshifumi Kitamura. 2019. **CubeHarmonic: a new musical instrument based on Rubik's cube with embedded motion sensor**. In ACM SIGGRAPH 2019 Posters (SIGGRAPH '19). Association for Computing Machinery, New York, NY, USA, Article 53, 1–2.

❱ **DOI** https://doi.org/10.1145/3306214.3338572

⟫⟫ Relevant Classes

Below is a non-exhaustive listing (see transcripts) of graduate level classes closely related to my research interests.

MEng - INSA de Lyon
- ❱ Human Computer Interaction
- ❱ Logical Approach to AI
- ❱ Signal Processing
- ❱ Statistics, Probability
- ❱ Linear Algebra and Image Rendering
- ❱ Algorithms for Artificial Intelligence and Graphs
- ❱ Algorithms and Data Structures

MSc - Tohoku University
- ❱ Computer Vision
- ❱ Algebra and discrete mathematics
- ❱ Intelligent Systems Science
- ❱ Higher Order Vision Science
- ❱ Software Construction

⟫⟫ Engineering & Research Projects

2019	**27th International collegiate Virtual Reality Contest**	Student Contest

❱ 2 entries: a multiplayer MR competitive experience with simulated body shrinking & a multi-sensory haptic experience based on the rubber arm illusion

❱ Team of 6 people, contributions include: project direction, MR interaction engine development for ARrietty, CG effects (shaders)

❱ More details: http://ivrc.net/archive/Tabletop%20ARrietty2019/, http://ivrc.net/archive/2019/

2016	**Industrial Collaborative Engineering Project**	INSA de Lyon

❱ Design, manufacturing, testing, and presentation of an interactive juggling robot partner

❱ Team of 13 people, contributions include: team management and production duties, design of the robot frame, manufacturing, arduino motor control algorithm

❱ More details: https://www.youtube.com/watch?v=riOeHHU9Ezo

⟫⟫ Conference & Volunteering Experiences

Jul. - Aug. 2019	**Student Volunteer - SIGGRAPH 2019 Los Angeles**

Dec. 2018	**Student Volunteer - SIGGRAPH Asia 2018 Tokyo**