

Sebastian Yang

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Education

Carnegie Mellon University (Pittsburgh, PA)

B.S. in Information Systems with University Honors (GPA: 4.0/4.0)

Aug 2018 - Dec 2021

B.S. in Statistics and Machine Learning with University Honors (GPA: 4.0/4.0)

Minor in Game Design
Minor in Business Administration

Programming Language: C# (Unity), Swift (SwiftUI, ARKit, RealityKit), Python (nlk, Numpy, pandas), Java, C

Data Analytics: R(ggplot, tidyr), SQL, MongoDB **Web Development:** Ruby on Rails, HTML, CSS, JS, Jekyll

Relevant Coursework: iOS Application Design and Development • Research Issues: Designing for XR • Principles of Imperative Computation • Algorithms and Advanced Data Structures • Database Design and Development • Statistical Computing

AR/VR Development

Virtual Reality Software Engineer

Meta (Facebook) Reality Labs

February 2022 - Present

- Transformed Meta's annual new product release event [Connect 22](#) into an immersive virtual reality 3D experience

iOS Software Developer

Personal Projects

Sep 2020 - Present

- Developed "[Artlas](#)", an augmented reality app that tells users building names by scanning the buildings from any angle
- Developed "[Earf](#)", a planetary AR simulation that procedurally generates terrains using Perlin noise and custom shaders
- Developed "[What2Yum](#)", a collaborative asynchronous decision-making app that helps a group of people choose what to eat
- Utilized SwiftUI, ARKit, RealityKit, CoreData, MapKit, CoreLocation, MVVM paradigm, Yelp API and Firebase

Mixed Reality Research Assistant

CMU Augmented Perception Lab

Jun 2021 - Dec 2021

- Prototyped a mixed reality navigation visualization software for autonomous vehicles with the Robotics Institute
- Developed hand interactions for scaling and rotation, MR/VR transitions, and object detection visualizations
- Contributed to a VR HCI research study on the change blindness phenomenon by developing a use case using Unity and C#

Virtual Reality Research Team Lead

CMU Cognitive Development Lab

Oct 2019 - Dec 2021

- Headed a 4-person team to develop a VR research software; developed a custom Stroop system and organized 11 sprints
- Investigated the correlation between physical activity and cognitive improvement. Co-authored paper [published](#) on iLRN

President and VR Game Developer

CMU Game Creation Society

Feb 2019 - Dec 2021

- Led the development of a VR horror [game](#) with 37 team members in addition to 4 mobile, 5 PC, and 6 VR games using Unity
- Managed a club with 100+ active members making 9 games in parallel; taught a CMU-credited course on Unity development
- Implemented custom collision systems for VR golfing gesture, extendable enemy and weapon systems using Object-Oriented Programming, mobile touch-screen optimization for PC games, networking for VR, and procedural generations of levels

Virtual Reality Software Developer

Various Hackathons

Oct 2021 - Present

- Developed "[Vinder](#)" a VR dating app that hosts dates in safe virtual rooms, won Facebook Metaverse Award in HackCMU
- Developed "[Lightly Heavy](#)" a space VR combat game in zero gravity, won the U.S. Space Force Award in HoyaHack
- Developed "[Bat and Monitors](#)", a VR rage room for emotional release in a safe environment, won 2nd place in µHacks

Product Management

Production Management Intern

Blizzard Entertainment

May 2021 - Aug 2021

- Managed and triaged 200+ tickets by directly interfacing with 8 functional teams to hit a milestone for *Diablo Immortal*
- Designed user stories and a product roadmap for accessibility features and led the requirement negotiation with NetEase
- Coordinated two product feedback loops between NetEase and Blizzard for a smooth co-development process

Business Development Intern

ByteDance (TikTok) US

June 2020 - Aug 2020

- Collaborated on strategizing a 3-year market entry plan, including product matrix, revenue forecast, and ROI estimate
- Conducted 25+ market research studies including competitor analysis, market landscape scans, and capital movements
- Identified potential strategic partners and led an evaluation meeting for prospective investment and licensing deals

Market and User Researcher / Game Design Trainee

Tencent Interactive Entertainment Group (MUR Department / TiMi Studios)

March 2020 - June 2020 / Sep 2020 - Dec 2020

- Led an eight-person mobile game development team using an agile-scrum approach guided by mentors from TiMi Studio
- Concluded 41 helpful insights by analyzing 1000+ entries of first-hand survey data through data visualization
- Conducted two games' competitor research for Tencent in the US market; both reports graded as "Excellent"