Ricky (Ryuki) Kobayashi

kobayashiryuki1002@gmail.com | 979-721-2596 | College Station, TX, 77840

PROFESSIONAL EXPERIENCE

Software Engineer Intern | Dell Technologies, Chesterbrook, PA *May 2021–Aug 2021*

- Developed a portable runtime test framework in **Python** for Windows, Linux and Boomi Atom Clouds
- Redesigned golden file comparison; placed files on **S3** so that runtime harness can easily access
- Analyzed customers' API gateway access data; reduced render time and improved memory usage by 50% by optimizing log parser code

Software Engineer | Illusion, Tokyo, Japan *Aug 2017–Aug 2020*

- Directed a five-member team and launched the VR Kanojo series as a **Unity** engineer; ranked in 10 top-selling VR games in the world for 4 years in a row with 300,000+ downloads and achieved $15 million of revenue
- Implemented a localization system with **Google Sheet**; utilized **AssetBundle** to save memory
- Constructed an object inertia system in **C#** to help the in-game character predict ball trajectory utilizing **linear algebra**
- Released the **TsunTsun VR** project on Steam (5,000+ downloads); transmitted haptic feedback from virtual characters via **Bluetooth** and bHaptics
- Deployed a **multiplayer** function via wireless **LAN** using **UNet**

Software Engineer | Gokuraku, Inc., Tokyo, Japan *Feb 2017–Jul 2017*

- Designed a **real-time VR viewer** for a 360° movie shot with a dual-fisheye camera using **Unity**
- Mapped each pixel of a camera-captured image into a dynamically created mesh in **C#**, rendered in real-time

PROJECTS

Nursing Virtual Reality Training Program *Aug 2021–Jan 2022*

- Built VR application with **Unity** to support practitioner's overall performance in SBIRT assessment
- Enabled transcript system with **Google Cloud Speech Recognition** to record conversation
- Implemented automatic response system; turned user's voice into text, sent HTTP request to retrieve best matching label from pre-trained model in **Nyckel** (ML platform) and returned appropriate response

Aggie SAMA Website *Jan 2021–Sep 2021*

- Built web application with **Node.js** + **Express**, **HTML**, **CSS**, and **JavaScript** empowering a student organization to manage day-to-day operations; utilizing **Bootstrap** to ensure **responsive** design
- Constructed backend system utilizing **Node.js** and **MSSQL** to efficiently store and serve dynamic content previously managed through code

EDUCATION

Texas A&M University, College Station, TX *Aug 2020–May 2022*

Master of Computer Science (GPA: 3.7/4.0)

- Relevant coursework: Distributed Systems, Cloud Computing, Graph Mining, Software Engineering, Analysis of Algorithms, Problem Solving Programming Strategies, Artificial Intelligence, Machine Learning, Deep Learning

University of Tokyo, Tokyo, Japan *Apr 2010–Mar 2015*

Bachelor of Science in Earth and Planetary Science

TECHNICAL SKILLS

Programming languages: Proficient in Python, C#, JavaScript; familiar with Java, C, C++, SQL, Julia
Tools: Git, HTML/CSS, Bootstrap, Node.js, React.js, AWS, S3, Boomi, Docker, Windows, Linux, Jira, Unity

ACTIVITIES / ACHIEVEMENTS

Commitment to NetworkX library (Python package for network analysis) *Dec 2021*

- Improved the performance by 20% by introducing double-ended queue in shortest-path betweenness algorithm

ICPC (Competitive Programming Contest) South Central USA Regional Round *Mar 2021*

GREE award: **Lunar Sports VR Hackathon, sponsored by JAXA** *May 2018*

- Engineered a VR training simulator for Kendama (a traditional Japanese skill toy) in a simulated gravity environment; utilized a **particle-based physics** engine to create realistic Kendama ropes