Kurt **Waage**

Tokyo, Japan

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Work Experience

Black Tower Studios   *Japan*

Game Programmer   *Aug. 2024 - Present*

- Support, maintain, and create new content for live service game The Texas Chainsaw Massacre
  - Overhauled interaction system to accommodate player base requests
  - Used Gauntlet to create automated tests for debugging Windows, Xbox, and Playstation platforms
  - Optimized gameplay, animation, and network systems for Windows, Xbox, and Playstation platforms
  - Participated in content release feedback cycle by working closely with quality assurance and designers to fix bugs
  - Moved existing dedicated server system to peer-to-peer system
  - Updated or created how-to documents for new or existing systems

Woven by Toyota   *Tokyo, Japan*

Research Engineer   *May 2022 - Nov. 2023*

- Researched, developed, and integrated software and hardware XR capability for selected autonomous vehicles
  - Developed API for connecting the autonomous system with external applications
  - Designed hardware fixtures and integrated an external PC and XR components into an autonomous vehicle
- Developed software and hardware triggers for emergency stop functionality of the autonomous vehicles
  - Provided on-site field support during testing, and conducted bug scrubs after testing

Toyota Research Institute   *Cambridge, MA | Tokyo, Japan*

Systems Integration Engineer   *Oct. 2018 - May 2022*

- Co-lead two separate vehicle fleet builds totaling 19 completed autonomous vehicles
- Documented and reported issues to relevant teams in Japan and USA, participated in followup bug scrubbing, and was responsible for implementing and verifying identified fixes
- Trained team members within the Japan branch on how best to conduct vehicle builds, retrofits, maintenance, and troubleshooting

Vehicle Support Engineer

- Chosen, as 1 of a 6 person team, to report to support Toyota's involvement in the Japan 2020 Olympics as a system integration co-lead
- Responsible for vehicle builds, retrofits, and field support for a fleet size of more than 10 vehicles

Northeastern University   *Boston, MA*

Research Assistant   *Nov. 2016 - Jan. 2018*

- Robotics and Intelligent Vehicles Research (RIVeR) Laboratory
- Researched underwater robotics and monocular, optical flow based navigation and perception

Orbital ATK   *Layton, UT*

Manufacturing Engineer   *Aug. 2015 - Apr. 2016*

- Mechanical engineer assigned to the Airbus A350 project

US Army   *Germany*

Sergeant – Section Leader   *Sept. 2005 - Feb. 2010*

- Honorably discharged from the US Army Infantry as Sergeant (E-5) with two deployments to Iraq
- Taught Military Operations in Urban Terrain (MOUT) to foreign and domestic groups of platoon size or larger

Education

Northeastern University   *Boston, MA*

M.Sc. in Mechanical Engineering   *2016 - 2018*

- Gordon Institute of Engineering Leadership fellow
- Concentration in Mechatronics

Colorado State University   *Fort Collins, CO*

B.S. in Mechanical Engineering and Engineering Science   *2011 - 2015*

- Minor in Mathematics
- Space Concentration

Skills

C++, C#, Unreal Engine, Blueprint, Replication, GAS, UMG, Gauntlet, Perforce, Rider, Visual Studio, Jira
Version Control, Debugging, Optimization, Multiplayer, Consoles (Xbox & Playstation), Extended Reality (XR)