Kurt **Waage**

Japan

WaageFreelance@gmail.com | kurtw.github.io | kurt-j-waage

Summary

Creative and detail-oriented Game Programmer with expertise in Unreal Engine, C++, and C#. Experienced in gameplay systems, UI design, multiplayer optimization, and automated testing for PC and console platforms. Brings a unique background in robotics and XR integration to craft immersive, technically robust player experiences. Skilled in debugging, optimization, and cross-disciplinary collaboration.

Skills

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

Work Experience

Black Tower Studios — *Japan*

Game Programmer — *Aug. 2024 - Present*

- Supported, maintained, and created new content for the live-service game The Texas Chainsaw Massacre.
  - Updated the interaction system for more natural player experience.
  - Created automated tests using Gauntlet for Windows, Xbox, and PlayStation, reducing release bugs.
  - Reworked and developed UI menu flows for game modes Rush Week and Custom Matches.
  - Optimized gameplay, animation, and network systems across multiple platforms.
  - Collaborated closely with QA and designers to identify and fix critical bugs before release.
- Designed, implemented, and maintained content in the Fortnite ecosystem (Black Tower Bites) using Unreal Editor for Fortnite and Verse.

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 APIs to connect autonomous systems with external applications.
  - Designed hardware fixtures and integrated external PCs and XR components.
- Built software and hardware triggers for emergency stop functionality, improving safety response times.
  - Provided on-site field support and conducted thorough post-test bug reviews.

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

Systems Integration Engineer — *Oct. 2018 - May 2022*

- Co-led two vehicle fleet builds, completing 19 autonomous vehicles on schedule.
- Documented and reported technical issues, led bug scrubbing, and implemented verified fixes.
- Trained team members on vehicle builds, retrofits, maintenance, and troubleshooting.
- Selected as 1 of 6 engineers to support Toyota's autonomous vehicle showcase at the 2020 Japan Olympics.

Northeastern University — *Boston, MA*

Research Assistant, Robotics and Intelligent Vehicles Research (RIVeR) Lab — *Nov. 2016 - Jan. 2018*

- Conducted research in underwater robotics and monocular optical flow-based navigation and perception.

Orbital ATK — *Layton, UT*

Manufacturing Engineer — *Aug. 2015 - Apr. 2016*

- Supported aerospace manufacturing processes and quality assurance.

US Army — *Germany*

Sergeant – Infantry 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