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# Build Engineer

**Reports To**

Lead Build Engineer

**Responsibilities**

* Maintain build machines;
* Work as a key part of an agile development team, organising and planning the implementation of features with direction from their lead, and assist less experienced programmers;
* Ensure coding standards are followed in their own and others code;
* Collect, interpret and analyse the technical feasibility of system/feature specifications;
* Write clear and well-structured code using the appropriate data structure and algorithms while bearing in mind performance, maintenance and architectural requirements;
* Include comments in the code and document implemented features;
* Stay up-to-date with technology advances within the field;
* Perform code review for peers;
* Assist less experienced build engineers;
* Capture data from the build farm to help define future development of the build system and build farm;
* Support the Lead Build Engineer in any ad-hoc duties and requests.

**Skills and Knowledge**

* Knowledge of a source control system (e.g. Perforce);
* Knowledge of script languages (e.g. C#, Perl, Python, Lua);
* Knowledge of build configuration and makefiles;
* Knowledge of build management tools (e.g. Jenkins);
* Knowledge of all areas of the build pipeline
* Understanding of speed and memory considerations, and able to implement basic optimisations;
* Knowledge of common algorithms, data structures and patterns, and their application;
* Ability to analyse unfamiliar code of a reasonable complexity to understand, extend and refactor functionality of an existing module;
* Ability to debug defects of a reasonable complexity, including memory related issues, and multi-threading;
* Knowledge of difference software development methods such as Test Driven Development, Unit Testing, Agile, etc.
* Knowledge of console platform submission requirements (TRCs, XRs, etc.) is desirable;
* Ability to adapt to change;
* Good interpersonal and communication skills.

**Relevant Experience**

* Bachelor’s degree in computer science or computer engineering or equivalent;
* 3 years commercial software development experience with significant involvement in 1 published project as a build engineer;
* Experience with large engines and complex pipelines is desirable;
* Experience working with at least one modern console platform is an advantage (e.g. PS4, XBOX 1, Switch);
* Experience in software design patterns and UML;
* Experience of asynchronous, multithreaded application development is desirable;
* Experience profiling and optimisation is desirable;
* Experience working in a multi-site collaboration environment is desirable.