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Print Friendly Summary: doy-lee.github.io/doylet_resume_summary.pdf

DETAIL

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RESUME QR CODE



WORK EXPERIENCE

- 2018 FEB** **LOKI** **Blockchain Team** (github.com/loki-project/loki/commits?author=Doy-lee)
- CURRENT** Blockchain Engineer
- C++14, Boost, CMake, CI, Cryptography, Open Source, Windows/Mac/OSX/Android
 - Derive incentivised nodes from Blockchain with custom cryptographic registration, unlocking and locking funds transactions, P2P behaviour metrics and voting mechanism to kick bad nodes out over a distributed network.
 - SN Enforced Block Checkpointing (mitigate 51% attacks). Previously manually updated every network-wide upgrade, SN's autonomously vote over P2P, lock blocks and handle conflicting alternative-chains to provide stronger guarantees on the Blockchain at the tip.
 - Add Loki Name System (DNS via Blockchain). Name records for wallets, messenger and website domains via Lokinet stored on the Blockchain with expiration, ownership and transfers/updating via private-public key cryptography, a end user API via JSON RPC and stored into SQLite.
 - Handling builds and distribution via Windows, Linux, OSX, Android, including coordinating time-sensitive network wide upgrades (i.e. Hardforks) and critical fixes in production.
 - Bug-fix/improve/create tooling for the Service Node network including a re-write of the Monero testing framework and creating in-house integration tests using named pipes over multi-process.
- 2017 AUG** **WARGAMING** **Client Tools Team**
- 2017 NOV** **SYD**
- Intern
- Software Engineer
- C++11, Qt, Jira, Perforce, Plastic
 - Working on internal tooling app for assisting content creation.
 - Bug fix and implement 21 tickets for tools over a span of 3 months.

SIDE PROJECTS

- CURRENT** **DQN LIBRARY** **Personal Utility Library C++** (github.com/doy-lee/dqn)
- Personal library for faster prototyping and memory aware data structures.
 - Custom memory allocators for cache friendliness, minimising kernel allocation overhead and giving the user control over allocation scheme, memory model and lifetimes.
 - Minimally allocating arrays/strings/builders w/custom allocator API, stack memory based variants for cache friendliness and minimal overhead.
- CURRENT** **NOVEL/KAY ENGINE** **Interactive Fiction/2D Game Engine C++**
- Side project to build interactive fiction to encourage learning new languages enjoyable.
 - Game Engine powered by Raylib
 - Custom IMGUI and Instrumenting Profiler w/Frame Graph, Call Table
- CURRENT** **RAYLIB SIMD** **Raylib SIMD Implementations (Rendering)** (github.com/doy-lee/RaylibSIMD)
- Reimplements Raylib's software rendering using SIMD via SSE (and soon AVX)
 - Practice implementing SIMD versions of scalar algorithms branchless, resulting in ~4x speed up
- 2017** **DTRENDERER** **3D Software Renderer from First Principles** (github.com/doy-lee/DTRenderer)
- DCHIP8** **CHIP8 Interpreter** (github.com/doy-lee/dchip-8)
- Solo, C/C++, Win32
- 2017** **MATH MASHER** **Educational Mobile Math Game** (doy-lee.github.io/luneaustralia) ([archive only](#))
- Lead Dev, Game/Asset Designer, C/C++, Tooling, Photoshop, Cocos2Dx, Audacity
- 2016** **DENGINE** **Basic 2D Game Engine For Learning** (github.com/doy-lee/dengine)
- Solo, C/C++, OpenGL, GLFW, GLEW, Sean Barrett STB Libs, OpenAL

EDUCATION

2014-2017 **UNIVERSITY OF NEW SOUTH WALES** Bachelor of Science (Computer Science)