Aaron Leonard

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Work Experience

Software Developer at Scott Logic, November 2021 - Current

- Began as a Graduate Developer, upskilled in React, Angular and Java Springboot in training. Promoted to Associate Developer in May 2022 and Software Developer in May 2023.
- Collaborated with a Fortune 500 Fintech client and a Scott Logic team on a web dashboard for provisioning Quant data.
- Responsible for build system, ensuring dependencies are kept up to date. As examples: This involved updating several internal dependencies and a lot of external dependencies from Angular 13 to Angular 17. Additionally responsible for reviewing automated dependency upgrade PRs as not all can be done. Further, is streamlining our CI/CD Jenkins pipelines for testers, by setting up automated UAT builds to run overnight so a fresh and up-to-date UAT environment is provided. For developers,I also provided links that would automatically be added to PRs so code review could cover behaviour in a development environment.
- Proactive about Production Urgent incidents; an example involved removing 200 lines of junk code, by improving our API calls using query parameters for a poorly documented API. Another example involved our neighbouring team's API endpoint that provided information for the dashboard not working. I narrowed it down to an issue involving how they handle query parameters; this issue was identified within half an hour with their team notified. This issue saw several regressions which were similarly quickly identified and notified.
- Responsible for progressing several large "epic" sized features. One is moving from requesting one at a time, to using a "shopping basket" approach, including designing mockups, requirements gathering with business, working with testers and assisting in Code Review.
- Proactive in knowledge sharing, signposting others to internal documentation, writing documentation (i.e. about our database, about our LaunchDarkly Flags process).

Projects

- BlackWindBooks.com, a Print on Demand Book store, written using React, NextJS, NodeJS and linking up to the Stripe and LULU Apis and including email integration for shipping information and digital copies of books. Made so I can print Zines and books I have rights to.
- Maintainer for Multiple websites: my portfolio site aaronleonard.xyz, my personal website risingthumb.xyz and my jokes website achtung.risingthumb.xyz. These all use a framework called werc, where my site is listed as an example in documentation.
- A low-resource VPS running Debian 10 and with 1 CPU Core, 50GBs of SSD Storage and 2TB of Bandwidth and 2GB of RAM granted, stipulating a low-resource usage requirement. Fully secured with proper practices.
- A Mail Server hosting the emails risingthumb@risingthumb.xyz and aaronleonard@risingthumb.xyz, configured properly with ReverseDNS, Spamassassin, OpenDKIM, Postfix and Dovecot.
- 18+ Video Games made, including 500ml of Violence(A 3D Survival FPS inspired by Quake), Quiver(A procedurally generated 2D Roguelike with fully networked deathmatches and a variety of Al and a novel dungeon generator). See a full chronology here.
- Modding for games. Nyavigator(A Minecraft A* Pathfinder), IFF(A username grouping tagger) and custom maps and weapons in Garry's mod written in Lua and used collectively by 10000 unique players.
- A Discord Bot built using the Discord.js library and using SystemD services to ensure only one game server(Garry's Mod, Minecraft, Terraria, SRB2Kart) is online at a time, to keep resource usage beneath 50%, and to stream music from multiple sources.





FOSS – Contributions and community support

- Godot game engine contributor, exposing Baked Lightmapping and Particle emission points APIs for scripting.
- Contributor to the Xorg utility Xmenu built with C, extending this with Vim keybinds.
- "Rex is Godot" A library for loading rexpaint files in Godot 3.0. Listed on their resources page.
- Neofetch, a commandline utility providing information on the Operating System I extended with Überzug image rendering support.
- IndieWeb carnival host and contributor.
- func_godot(a 3D level generator) code reviewer and developer, extending it to associate texture information with brushes.
- Automation and utility scripts have been written to improve the usage and convenience of a Linux system. Some polished and released on my git page.

Education

- BSc Computer Science(First Class) from Newcastle University.
- A levels: A* in Mathematics, B in Further Mathematics and Physics.
- GCSE: 9 A-A*s, including Further Mathematics, Computer Science and English.

Technical Skills - In no particular order

- **Programming, Scripting:** Java, C, C++, C#, PhP, ArmV7, Python3, GDScript, Bash/POSIX-Compliant Shell, Typescript, Javascript, GML, Lua, Scheme, eslisp. For Markdown I use HTML, CSS, Markdown, Lagrange gemtext.
- Tools, Libraries, Frameworks: Springboot, Spring webflux, SDL2, Raylib, werc, Angular, React, Godot, Source Engine, Gamemaker Studio 2, Vim, Visual Studio Code, Unity, Emacs, Tmux, ssh, git, Blender, Krita, Aseprite, GNU/Linux, Windows 10, Libreoffice, Visual Studio, Plan 9, NextJS, LaunchDarkly, Cypress, Karma.

Interests

Chess, Video Gaming, Board Games, Blog Writing, Chess(, Video Gaming, Philosophy, Pre-modern Literature, Running. Learning new tech, especially older tech in the past with forgotten ideas. Comes from reading old texts such as SICP, The Art of Computer Programming and K&R C, and also participating in mailing lists for suckless software and Plan 9 from user space.

References

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Dr. Graham Morgan