

CURRICULUM VITAE

Nicholas Bates | github.com/NicholasBatesNZ

BEng(Hon) - Year 3 (Penultimate)

Proactive and passionate young programmer seeking an internship to complement his study in the Bachelor of Engineering (Honours) programme at the University of Auckland.

Highlights

- 400 hour Software Engineering internship at LogTag International Ltd.
- Coaching young programmers from Google Code-In and like programmes
- Top CAD design for ENGGEN 115 in semester two 2019
- Google Code-In finalist 2017
- Successful creation of commercial application for Riverhead Early Learning Centre
- Proactive contributor to open source projects Terasology and Destination Sol since 2016

Employment History

LogTag International Ltd. (November 2020 - February 2021):

Summer Technology Intern

- Full-time employment for 400 hours
- Set up and developed a front-end test suite for a large-scale global IoT web application
- Designed and implemented 165 regression proof tests for pure and impure functions taking state into account
- Contributed code quality improvements and bugfixes
- Technologies include Angular, Karma, Jasmine and TypeScript

The Terasology Foundation (2020):

Contributor 2016 - early 2020, Employee 2020

Employed to work on the space arcade game Destination Sol (part time). Responsibilities include:

- Refactoring and building upon the asset retrieval system
- Implementing an Entity Component System
- Coaching new contributors from programmes such as Google Summer of Code

Riverhead Early Learning Centre (2017 - 2019):

Weekly administrative and data entry tasks (part time).

Languages (to date)

Proficient: Java

Capable: JavaScript, TypeScript, Python, Groovy

Prior Experience: C, C#, C++, MATLAB, R, Haskell

Open Source Contributions

Passionate, committed and consistent contributor to the free and open source projects Destination Sol and Terasology. Averaging 10+ hours per week when on break from university. See GitHub profile at github.com/NicholasBatesNZ

Destination Sol (2017 - present):

- Integral member of the architectural/development team
- Mentoring new students from programs such as Google Code-In and Google Summer of Code. Includes git basics, code conventions, efficient programming, etc.
- Redesigned the particle emitter system to allow for substantially improved modularity on the ship fitting systems
- Built a newly redesigned website to replace the old splash site. Features include dynamic element animations, GitHub API data display. See destinationsol.org
- Testing and reviewing contributions to ensure they take the project in the right direction. Includes ensuring all applicable contributions are handled or adjusted to ensure sustained value to the project, ensuring code quality, etc.
- Continually delegating and/or undertaking documentation update tasks to ensure easy learning for new contributors.

Terasology (2016 - present):

- Code quality improvements
- Review and testing of code contributions
- Ensuring documentation is up to date and updating where necessary
- Small programming tasks as requested from other contributors
- Google Code-In mentoring

Other Projects

Python project to automate the sign-in/out process for parents of children attending Riverhead Early Learning Centre. Used software and hardware co-design to replace the pen and paper sheets. Time savings estimated at more than 2 hours per week, due to eliminating the need for inputting the data into the computer system. 2018

C# Project that changes the desktop wallpaper to a new, high-quality, picture every day. 2016

Other Achievements

Member of the North Shore Junior/Youth Orchestras 2012-2019 playing 1st, 2nd violins, viola and percussion.

Tour Concertmaster for the North Shore Youth Orchestra 2019

2nd violin in the Auckland Philharmonia Orchestra's Big Play In 2018 + 2019

Senior School Music Cup

References

References are available on request