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Sean Lynch

ABOUT

I have achieved a first class honours degree in Computer Science from the University of Limerick. I have completed two internships with Thales Netherlands and Confirm Smart Manufacturing. I have worked for PDI Software and Lets Get Checked as a Software Engineer.

SKILLS

Programming Languages: Java, Python, Lua, C++, Javascript, C, PHP, MySQL, CSS, F#, C#, Typescript, Dart, Golang and HTML.

Web Technologies: Django, Postgres, PHPmyAdmin, MySQL, MongoDB, Flask, Angular

IDEs and Design Tools: IntelliJ, Rider, VS code, Nano, PyCharm, UML, Android Studio, Qt, LucidChart

Operating Systems: Windows, Fedora, Ubuntu

Practices: Functional Programming, Object Oriented Programming(OOP), Test Driven Development(TDD), Agile Methodologies (Scrum)

EXPERIENCE

LetsGetChecked, Remote, Ireland — *Software Engineer*

May 2023 - December 2024

- Developed a Patient Management System adhering to local legislation throughout the US and IRL
- Used F# and C# to roll out new features and fix bugs
- Worked in a kanban workflow using Jira and Azure to plan work items

PDI Technologies, London, United Kingdom — *Software Engineer I*

Sep 2022 - May 2023

- Designed and update SQL procedures to perform database operations using Microsoft Server SQL (MSSQL)
- Developed features for an online learning platform in Typescript with the AngularJS framework
- Developed and overhauled .NET Core API in C#
- Worked in an Agile team using Jira and Azure to coordinate development

Confirm SFI Research Intern, Limerick, Ireland — *Intern*

Jul 2021 - Sep 2021

- Developed a model driven development approach to a programmable smart glove.
- Worked primarily in Java developing a library for DIME IDE that allowed an easy interface with the smart glove.

Thales, Netherlands — *Software Engineer Intern*

Sep 2020 - Jan 2021

- Joined Security, Architectural and Edge development teams.
- Worked with my supervisors to develop features according to client requirements.
- Worked primarily in Java with some focus in C.
- Built a vibration sensor using an arduino and connected it to an array of sensors using a raspberry pi.
- Generated virtual AIS data for a demonstration.
- Developed an encrypted video streaming application using the FFmpeg library and a java networking library.

PUBLICATIONS

mHealth Use in Healthcare Facilities: Raising Awareness in Data Protection, Privacy and Safety — *HEALTHINF*

DOI: 10.5220/0010854100003123

AWARDS

- Gold President's Volunteer Award for 60+ hours of volunteering 2018-19 / 2019-20 / 2020-21 / 2021-22
- President's Award for high academic achievement x4
- 2nd Place in Ireland, NASA SpaceApps 2021 competition
- Bronze Gaisce President's Award
- Winner of SEAI award SciFest Limerick 2016

SIDE PROJECTS

Learning to play Atari using Deep Reinforcement Learning — *Dissertation on Reinforcement Learning*

Analysis of Current and Historical A.I. Learning

- Researched the development of the Reinforcement learning field from an academic perspective.
- Investigated the current leading edge technologies and techniques in the field of Deep Reinforcement Learning
- Performed several experiments in the OpenAI gym using various Q-Learning techniques to train A.I. Agents.

Space Bean — *Application to educate users on Asteroids and Light Curves*

NASA SpaceApps Challenge

- Brought together a team of programmers and mathematicians for the competition.
- Developed an application that could render an asteroid from an stl file and its subsequent light curve. The application allowed the user to manipulate the asteroid and the light source, showing in real time how the light curve was affected by this.
- Application developed in python using the PyQt, Astropy and VTK libraries
- <https://2021.spaceappschallenge.org/challenges/statements/when-light-curves-throw-us-curve-balls/teams/space-bean-hunters/project>

Clois — *Irish Language Audiobook Service*

Passion Project to provide Open Source Irish Language Content

- Project's focus is on providing a platform similar in concept to audible, focusing on audiobooks and native Irish Folklore Stories
- Working with a linguist and another programmer, we are using materials that have run out of copyright as material for the platform
- The application aspect is being developed using the Flutter framework and the DART programming language
- The server aspect is being developed using the GIN framework of the Golang programming language
- <https://github.com/Techatrekka/clos>
- <https://github.com/Techatrekka/AudioBookServer>

EDUCATION

University of Limerick, Ireland — *Computer Systems, B.Sc.*

Sep 2018 - May 2022, Limerick

Achieved a First Class Honours

Ard Scoil Rís, Limerick — *Leaving Certificate*

Sep 2012 - May 2018, Limerick