

Allan Callaghan

Experienced Software Engineer
and Computing Educator

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Professional Experience (Highlights)

4 years
2020 – present

Senior Lecturer in Computing Education – Canterbury Christ Church University and Lecturer in Computing

Module lead and creator of undergraduate Level 6 “Programming Frameworks and Languages”.

Taught a range of programming modules. 3rd Year computing project supervision.

Subject lead for teacher training for secondary school Computing. Supported computing mentors in schools, responsible for interviewing PGCE candidates. Computing outreach through STEM Hub upskilling Computing teachers in Kent.

1.5 years
2019 – 2020

Senior Software Engineer (CICD Focus) – GenomicsEngland.co.uk

CI/CD specialist working in the bioinformatics pipeline team processing human genomes for the NHS's upcoming Genomic Medicine Service. Assisted development of in-house pipeline for processing human genomes. Migrated a legacy monolith into micro-services deployed to AWS. Advised company wide developer process/CI strategies.

(Python, Docker, AWS, Jenkins2, PostgreSQL, RabbitMQ, DataDog, GitHubActions, GitLabCI)

0.5 years
2018

Build Tools Engineer – CoInvestor.uk

Contracted to create test and build infrastructure for the CoInvestor Alternate Investment Platform.

Containerised all existing services for local development and cloud testing pipelines.

(Python, Docker, AWS, Jenkins2, Cypress)

6 years
2012 – 2018

Lead Test and Tooling Engineer – Global.com

Supporting all aspects of web/app digital content of the national radio brands CapitalFM, Heart, ClassicFM, LBC, Smooth, RadioX and Gold. Originally hired as a python server side specialist, moved to native Android development (18 months), moved to team lead of testing infrastructure and development tooling (14 months). Recruited the test team.

Projects include: Jenkins deployment pipeline for feature releasing brand websites, Android and iOS apps with full automated tests pipeline, migrated website login infrastructure, created API micro-service for deploying configuration to mobile apps, migrated content databases to our in-house content management system, improved service resilience with self healing services, unified our production and development workflows, won various internal prototyping hack days. (Python, Django, Android, Java, Jenkins, MySQL, Elasticsearch, Docker, Selenium, Appium, Jasmine, es6, Sass, Webpack)

3 years
2009 – 2012

Lead Developer – CivicBoom.com

Created an experimental citizen journalism platform for a tech startup. (Python, PostgreSQL)

Lead developer of a team of four. Recruited the technical team. Early work with mobile app video capture with server infra

Open Source Programming Projects

2012 – present

KaraKara.uk – Mobile Karaoke Event System – github.com/calaldees/KaraKara

A mobile phone based karaoke system. Users can search/preview/queue tracks from their mobile phones. A projector system projects the event and call's singers to the mic. Containerised video encoding pipeline.

Used at a range of events in throughout the UK. (Python (Sanic), React, TypeScript, MQTT, Docker)

2012 – present

Teach Programming Resources – github.com/calaldees/TeachProgramming

A range of teaching resources/workshops for teaching (HTML5/Javascript, Python, Java, VB.NET, PHP, C#)

Activities include: multi language chat system, web message-board, interactive games, language processing, data acquisition, simulation. Created a dynamic multi language cheat sheet.

2014 – 2019

superLimitBreak.uk – Live Music Project – github.com/SuperLimitBreak

Cover band of anime + videogame soundtracks with interesting live stage tech.

Created the software for live stage midi synchronised holographic projection to multiple projectors, custom DMX lighting and mass audience interactive videogames with mobile phones. (Python, ThreeJS, Webpack, es6, Docker)

Perform in the band with synth/piano and bass guitar.

2011 – 2015

Software Prototyping Events – Won an a range of awards at hack/prototype events

Attended 8 (multi-day) events. Winning team 5 events. Some of the prototypes were for National Office of Statistics, Honda, The Guardian

Formal Qualifications & Certifications

2020 – 2022

Higher Education Fellowship + PGCAP – Canterbury Christ Church University

2003 – 2004

PGCE: Secondary ICT (Qualified Teacher Status) – Canterbury Christ Church University

1999 – 2002

Computer Science BSc – 2:1 – University of Kent

2006

Sun Java 5.0 Certified Programmer – Sun Microsystems

2006 – 2015

Driving Licences – Category A (Motorcycle) 2006, B (Car) 2007, D (Bus) 2015

Other Activities

2023 – present

CodeKids.org.uk – Workshop creation and delivery (school holidays)

Creating software engineering experiences for age 10 to 15. e.g. Creating “Chromecast” clone from scratch in JS.

2019 – present

BarCampCanterbury.com – Organiser of local community tech unconference

Annual event. 80 Attendees. Organised venue, sponsors, advertising, catering. Hosted at the University of Kent.

2022 – present

Classic Car Restoration – Maintaining a 1970 Triumph Herald.