# **Murray Cumming**

Name:	Murray Cumming	Email:	murrayc@murrayc.com
Address:	Munich, Germany	Web:	murrayc.com
Date of Birth:	11th May 1973		<u>OpenHUB, GitHub</u>
Languages:	English (native), German (fluent)	Nationality:	United Kingdom, Germany

Experienced **C++, Java,** and **Go** developer, usually on **Linux**, working on systems programming, desktop, mobile, backend, and web. Focused on software quality and end user goals. Always learning. Successful in technical, management, and customer-facing roles. Experienced open-source developer.

# Skills

C++: GTK, gtkmm, Qt, git, automake, autoconf, CMake. Modern C++

Java: Android, GWT, Eclipse, Android Studio

Go: gRPC, Datastore, OpenCensus

Databases: PostgreSQL, MySQL

# Employment

- 2019 Google Germany GmbH, Munich, Germany
- present I led a team working on client endpoints and input experiences for the Stadia streaming game platform.

As team lead, I identified product requirements, designed systems, and supervised designs and implementations. I built a productive team by establishing a culture of thorough documentation, robust code, and shared understanding, providing opportunities for individual excellence.

C++, Java, JavaScript, TypeScript, Dart

- 2017 EGYM GmbH, Munich, Germany
- 2019 I lead a team working on:
  - User interface for electronic exercise machines (C++, Qt, gRPC, CMake, Docker)
  - Backend services (Go, Java, Scala, Kubernetes, gRPC, OpenCensus, Stackdriver).

I drove a process of discovery, documentation, and refactoring, creating a well-understood platform on which we built new features while ensuring reliability for our many active users.

I maintained a culture of quality, respect, and purpose, ensuring that developers felt supported by each other to create lasting work they could be proud of.

#### 2006 - **Openismus GmbH**, Munich, Germany

#### Founder , Managing Director, and Developer

#### <sup>2017</sup> Management

I built a team of highly skilled Linux C++ and Java developers around a culture of communication and responsibility, working with customers such as Nokia, Intel, OLPC, and Canonical.

I recruited and trained personnel, anticipating future needs while pursuing new business. I created detailed technical proposals and schedules in response to customer requirements, then managed

#### Team Lead

Senior Software Engineer, Teach Lead

projects to completion. I also managed finances across our two locations in Munich and Berlin.

#### Development

- Modest email client for Maemo (C, GTK+, tinymail)
- qtcontacts-tracker (C++, Qt, tracker, RDF)
- libmeegotouch (C++, Qt)
- Maliit input method framework and virtual keyboard (C++, Qt)
- Onine-Glom (Java, GWT, PostgreSQL)
- Glom (C++, gtkmm, Python, Boost, PostgreSQL)

#### 2000 - Consulting (Freelance)

2006

#### **Software Developer**

- 2006 **Siemens AG**, Munich, Germany Refactoring and stabilisation of a C++ streaming media control sub-system for a VoIP project on an embedded Linux platform.
  - 2005 **Web.de GmbH**, Karlsruhe, Germany Implementation of a high-performance C++ client-server network system on Linux for fast retrieval of user profiles from large data sets, for targeted online advertising servers.
  - 2004 **Sci-Worx GmbH**, Berlin, Germany Cross-platform Push-To-Talk and Presence software, for mobile phones, using C++.
  - 2003 Comneon, Linz, Austria
  - 2004 Mobile C++ GUI: integrated T9 predictive-input system and designed audio subsystem.
  - 2002 **Blueprint Software Ltd**: London, UK C++ Mac and Windows extensions for FileMaker Pro, interfacing with Java and Python.
  - 2001 **Beta Research GmbH**, Munich, Germany GUI for access control of digital satellite TV. C++, Qt, Solaris, DbTools.h++, Xerces-C++.
  - 2000 **MyBau.com AG**, Munich, Germany Development of JSP-based website.
  - 1999 Giesecke & Devrient GmbH, Munich, Germany
  - 2000 Development of applications to manage smartcards. Visual C++.
- 1998 ORGA Card Systems (UK), Maidenhead, UK
  Applications Development Engineer
  1999 Creation of a smartcard development IDE and utilities. Visual C++.
- 1997 Blueprint Computer Software Ltd, London, UK
  1998 Development of highly usable bespoke relational database systems. Filemaker Pro, Visual C++.

1996 - 1997	<b>Space Airconditioning plc</b> , Guildford, UK Complete overhaul of transaction and stock management database.	Systems Designer
	Makin Rochard Ltd, Hampton Wick, Surrey Bespoke relational database solutions, using FileMaker Pro.	Applications Developer
1993 - 1995	<b>Stibo Datagraphics</b> , Swindon, UK DTP using Quark, PhotoShop, etc on MacOS.	Typesetter
1992 <b>-</b>	Temporary / Short-Term Contracts, Swindon, UK	Administration

1993 DTP and data entry

# **Education and Qualifications**

06/2014	Goethe-Institut	German: Goethe-Zertifikat C1	
08/1991 - 06/1992	Edinburgh University, UK	Politics, Psychology, Social Policy: First year only.	
09/1989 - 06/1991	New College, Swindon, UK	A Levels	1A, 3Bs, 1C
09/1984 - 06/1989	The Commonweal School, Swindon, UK	GCSE	8As, 1B

## **Open-Source Projects**

Project	Description	Role
g <u>tkmm</u>	The official C++ interface for the popular GUI library GTK+. Linux/Unix/Windows library.	Lead Developer
<u>libsigc++</u>	C++ signals/slots template-based library used by gtkmm.	Lead Developer
<u>Glom</u>	Generic GUI database design and editor application, for <u>PostgreSQL</u> , built in C++ with GNOME technologies for Linux.	Lead Developer
<u>Android</u> <u>Galaxy Zoo</u>	Official Android citizen science app for classifying <u>Galaxy Zoo</u> subjects. Java, Volley, REST, JSON.	Lead Developer
<u>iOS</u> <u>Galaxy Zoo</u>	Official iPhone / iPad citizen science app for classifying <u>Galaxy Zoo</u> subjects. Objective-C, REST, JSON.	Lead Developer
<u>bigoquiz.com</u>	Website offering computer science quizzes, tracking personal progress. Java, GWT, GWTP, AppEngine, Objectify.	Lead Developer

## Others

#### 2002 - 2005 Member of the GNOME Release Team

I helped to establish time-based releases, integrating multiple projects with little explicit coordination, via a reliable repeating 6-monthly schedule of beta releases, API freezes, UI freezes, string freezes, code freezes, etc, and quality guidelines.

#### 2004 - 2005 Member of the GNOME Foundation's Board of Directors

I helped to organize the GUADEC conference and shared ongoing administration.

### Referees

**Quim Gil**, Technical Contributor Coordinator, <u>Wikimedia Foundation</u>, <u>qgil@wikimedia.org</u>

Jens Georg, Senior Developer, Advanced Driver Information Technology GmbH, <u>mail@jensge.org</u>