# Joel Isaac Stewart Kitching

Ex-Google software engineer with 20 years of experience

#### **CONTACT**

Taipei, Taiwan +886 936 622 563 joel@jkweb.ca /in/joelkitching

#### **EDUCATION**

## University of British Columbia

**Bsc Computer Science** Vancouver, Canada 2007-2012

# **PERSONAL PROJECT**

#### **GNOME** extension

Took over maintenance of Soft Brightness Plus extension, and created x11docker-gnome for testing across different **GNOME** versions

Nov 2022-present

#### **INTERESTS**

Command-line enthusiast (fish, fzf, ripgrep, fd, entr) Kombucha brewing Mandarin, Hokkien Stable Diffusion art Hacker News Yoga

#### **EXPERIENCE**

#### Melio

Taipei, Taiwan Sep-Dec 2021

- Developed Node.js backend of Melio, a service to help consumers make climate-friendly shopping decisions
- Set up priority queue to unify batch and realtime Amazon product scraping, pushing 1M entities per month into local database
- Used complex PostgreSQL queries and text similarity heuristics to de-duplicate product and company database, crucial for accurately matching carbon footprint data and corporate commitments
- Implemented product filtering by translating from a Google-style search grammar into ORM queries, enabling non-technical users to annotate climate data

Node.js Mocha/Chai

Docker

Kubernetes

### Google

Taipei, Taiwan 2014–2021

- Led a 4-person team to rewrite Chromebook firmware UI, unifying user experience for tablets and clamshells
- Drove a project to enable dual-boot Chromebooks running Windows, heavily modifying coreboot verified boot flow
- Wrote a C++ daemon to validate detachable keyboard bases and perform reliable firmware updates
- Built a distributed Kafka-style event streaming engine to collect Chromebook manufacturing line data, transmit to Google corp servers, and perform aggregate analysis via a flexible plugin system

Embedded C C++ Python





Makefiles Gerrit

# Amazon (intern)

Seattle, USA 2011

Authored an internal Ruby on Rails tool for performing large-scale analysis of Amazon Prime impression data using Hadoop

## Tasktop (intern)

Vancouver, Canada 2010

 Based on input from Nokia, created a Kanban board for Eclipse written in Java, which later became the base of Tasktop's graphical planning suite

## Smallthought Systems (intern)

Vancouver, Canada 2009

Created Smalltalk-80 library for Stripe payment processing