# Jan M. **Harasym**

#### **EXPERT ONLINE INFRASTRUCTURE ENGINEER**

Snapperupsgatan 5, Malmö, Skåne, Sweden, 211-35

☑ jharasym@linux.com | 备 dijit.sh | ₩ dijit | 🛅 jharasym | У @dijit | 🖺 jharasym

"Nobody knows what I do until I don't do it."

Skills

**Operating Systems** Debian, RHEL, Solaris, OpenBSD, FreeBSD

High Proficiencies PostgreSQL, Kubernetes, SaltStack, Python StL, Docker/Containerd/OCI

General Proficiency Automation (Powershell/BASH/Python), InfluxDB (TICK), ELK, MySQL, Git, Perforce and others

**Programming** Python, Rust, Golang, Ruby, C, C++ (without templating)

**Web** Django with Python, Rocket with Rust, HTML5

**Languages** English (native), Swedish (basic proficiency), Finnish (limited), Russian (elementary)

**Work Rights** British Citizenship (native) & Swedish Citizenship (naturalised)

# **Experience**

Sharkmob AB Malmö, Sweden

#### **EXPERT ONLINE INFRASTRUCTURE ENGINEER**

Aug. 2020 - PRESENT

"Sharkmob is a AAA Games studio started in 2017 by the senior team responsible for The Division at Ubisoft Massive"

- Founder of Online Infrastructure Engineering
- · Led migration from AWS to GCP
- Became the companies leading subject-matter-expert for Kubernetes
- Implemented automation pipelines and local test environments using Docker and Minikube
- · Designed, implemented and maintained scalable robust solutions to metrics collection and log aggregation
- Extensive usage of Python (with rust extensions) and Terraform for automated deployment

Ubisoft Massive Malmö, Sweden

#### SENIOR INFRASTRUCTURE ENGINEER

Sep. 2014 - Aug 2020

- Part of a very small team responsible for the two largest always-online multiplayer games in the publushers history, and one upcoming
- led infrastructure architecture and deployment of 76,000 logical cores and 486TB of ram
- Reimagined configuration management in SaltStack,
- .. deprecating cfengine and chef for over 2,000 instances
- Implemented deterministic sharding cluster on top of PostgreSQL,
- studied database internals for 4 months, to better support an always online upcoming title.
- Designed a deployment process which allows physical servers to be deployed in under 20 minutes (windows or linux)

Firebox London, UK

TECHNICAL OPERATIONS MANAGER

Jun. 2012 - Aug. 2014

"Firebox.com is an e-commerce company based in London, England, that was created in 1998 as hotbox.co.uk."

- Sole-systems administrator on staff, head of "everything with a power socket"
- Was on call 24/7 and ultimately responsible for a large section of the company.
- Managed, OpenBSD, Solaris, Nexenta/IllumOS, Ubuntu Linux, RedHat Enterprise Linux, OSX, and Windows desktops and servers
- Maintained e-commerce system, and high-throughput marketing email systems

Venda London, UK

#### SENIOR SYSTEMS ADMINISTRATOR

Jun. 2011 - Jun. 2012

"Venda, Inc. is the world's largest SaaS provider of on-demand e-commerce to some of the world's leading retailers and manufacturers, including De Beers, Tesco, JVC, TK Maxx, The Metropolitan Museum of Art, Perry Ellis, Conde Naste, Universal Music and Urban Oufitters. Venda provides e-commerce services such as online shopping to mid-tier and Fortune 1000 companies for a monthly fee."

- Was twice promoted due to exceptional skill and behaviour in first year
- · Created unfathomable amounts of documentation, cleared outstanding ticket backlog and automated large amounts of processes.

Nokia Helsinki, Finland

Feb. 2011 - Jun. 2011 LINUX SYSTEMS ADMINISTRATOR

- Tech support for developers working on MeeGO in Ruoholahti R&D Department at Nokia
- · Learned how businesses operated, I worked closely with seasoned systems administrators
- Supported the python based atomic builds team
- gained a deep insight into Linux kernel tunables and internals and "The way Computers work" from a very accomplished prominent kernel hacker

#### **DarkScience Communications ltd.**

Coventry, UK

UNIX SYSTEMS ENGINEER

Sep. 2013, Mar. 2011 - Oct. 2011

- Maintained high availability website.
- Conducted several "best practice" tasks with the more senior administrators.

**West Midlands Police** 

VOLUNTEED DIGITAL FORENSICS ANALYST

Jul. 2007 - Nov. 2010

Coventry, UK

"Criminal Investigations Division of West Midlands Police. (CID)"

- Data collection, data recovery, and forensic examination as required.
- Research into forensic examination possibilities with available capabilities.
- Process and procedure documentation creation, maintenance, and improvement.

## **Education**

#### **Birmingham Metropolitan**

Birmingham, UK Sep. 2006 - Jun 2008

BTEC HIGHER NATIONAL DIPLOMA IN COMPUTER SCIENCE & UNIX ADMINISTRATION

• Dux Litterarum of class '08

# Extracurricular Activity \_\_\_\_

libsecure.so

SENIOR OPERATOR Nov. 2007 - Dec. 2017

- Gained crucial leadership and project management experience.
- · Learned about shared hosting, configuration management and networking
- Held programming challenges and capture the flag events.
- Hosted Mail/IRC/SILC and other communications used 24/7 by 250+ members. (at personal expense)

**Flagrun Networks** 

ADMINISTRATOR Jun. 2012 - PRESENT

- Helped maintain global gameservers and VPN's for 'LAN Party' events
- Maintained VOIP system for real time coordination/communication.

#### forskningsavd:: The Research Department

Malmo, Sweden Nov. 2014 - PRESENT

Nov. 2019

· Assisted in hosting considerable build farm for programming experiments and hosting.

- Reformed Email/SILC systems for communications.

## **Presentation**

SPEAKER

**GCP Podcast** Stockholm, Sweden

INTERVIEWEE Jun. 2021

- Discussing the events leading to my joining Sharkmob
- Stories about the development of The Division and its sequel
- Discussed the future of online gaming

DevFest, 2019 Stockholm, Sweden

• Stories about the development of The Division and its sequel

- Breakdown of our methodology of Cloud providers • Comparison of on-prem vs cloud
- Teased the future of online gaming

JAN M. HARASYM · CURRICULUM VITAE MARCH 2, 2022

#### E3:: Electronics Entertainment Expo

Los Angeles, USA

ENGINEER/DEMOIST Jun. 2015

- Demoist for Tom Clancy's The Division;
- Set up demonstration environment, calibration of monitors, Xbox's etc.
- Ran game server environment locally
- Live debugging of issues and resolution

#### **2600 Birmingham Conference**

Birmingham, UK

Sep. 2012

Feb. 2010

Speaker

SPEAKER

- "OPCODES" the modern bluebox
- Presented research into fuzzing phone systems and finding "OPCODES" which enable debug features
- Discussed Mobile Security albeit breifly

Coventry University Coventry, UK

• Talk on BTRFS and the future of linux filesystems

- Introduced BTRFS and it's impact on the filesystem space on Linux
- Compared features and performance with a battery of tests and examples

# Technology in personal life. \_\_\_\_

In my personal life I maintain an IRC network which spans the globe with a 99.97% uptime in the last 5 years which (at time of writing) is home to 743 internet denizens. I also host an online forum, both of these places are frequented by programmers, system administrators, security/privacy enthusiasts and hardware hackers (many of whom are students in universities across the world), it has been a trove of information and has often given me insights into new ways of looking at things — I have also gleaned some fantastic leadership skills, the ability to plan events carefully and additionally giving me the skills necessary to avoid undesirable behaviour with a firm but delicate hand.