HI THERE

I solve problems and break through perceived limitations using software. There is nothing quite as exciting as making machines work flawlessly in unison.

I build scalable, performant, and reliable services for the internet and blockchain.

See my recent projects at
www.donovansolms.com

✉ ds@donovansolms.com

🌐 www.donovansolms.com

📍 Centurion, South Africa

TECH STACKS

Go	Kubernetes
Python	Nodejs
TypeScript	Angular
JavaScript	React
Solidity	GraphQL
C#	NATS
PHP	Redis
SQL	MySQL
Protocol Buffers	Timescale
	Postgres
	Docker

SOFT SKILLS

Quick learner
Self-motivated
Strong work ethic
Curious
Innovative
Team leader

DONOVAN SOLMS

FULL-STACK DEVELOPER
WITH SPECIALISATION IN BACKEND ENGINEERING

STARTUP EXPERIENCE

CO-FOUNDER / CTO
2020 - Present

Funding
Seed
Self funded
Series A
Currently raising

Dr Derma Southern Africa

Dr Derma enables dermatologists to operate a medical-grade online practice.

South Africa has an enormous shortage of dermatologists. The country has a population of nearly 60 million with less than 200 dermatologists. Dr Derma allows dermatologists to see more patients by providing an efficient and compliant online consultation process.

More information available at
donovansolms.com/project/drderma

Website
drderma.co.za

CO-FOUNDER / CTO
2013 - 2015

Funding
Seed
ZAR 1.5 Million (~US$ 165 000)

Trevolta

Trevolta.com was an online travel crowdfunding platform that allowed anyone to *"Go places, make memories, inspire people and change the world along the way."*

We gained over half a million users within two months, peaking at 100 000 in a single day, which allowed us to raise R 1.5 million in seed funding. On the philanthropy side, Trevolta's platform contributed the funding required to move six rhinos to a safer location, away from local poachers.

Archived site
Internet Archive / Wayback Machine

Notable press coverage
Wall Street Journal

The Los Angeles Times

CO-FOUNDER / CTO
2013 - 2014

Funding
Seed
ZAR 100 000 (~US$ 11 000)

Cirqls

Cirqls leveraged the social networks you are connected to in order to build trust between buyers and sellers as well as provide recommendations for classifieds. Cirqls.com was the first startup pitch to be accepted by the Seed Engine Startup Accelerator.

We spent three intense months within the accelerator program building our product, training to expertly pitch and speak publicly, and develop our business acumen under the leadership of Marc Elias (ex-StartupBootcamp Amsterdam).
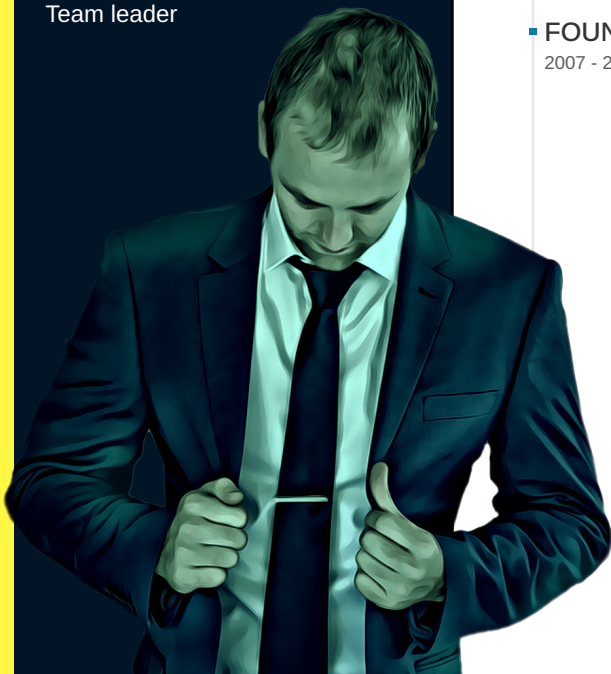
Archived site
Internet Archive / Wayback Machine

FOUNDER
2007 - 2011

Multitouch SA

Back in 2006, before multitouch was a mainstream technology, Jeff Han demonstrated a way to cheaply build multitouch displays. After getting acquainted with the technology and building my own display, I founded Multitouch SA - a startup building open-source software to advance the capabilities of multitouch displays and provide a platform for developers to build on.

Our Syre Multitouch Platform allowed anyone to develop interactive applications and animations using Adobe's ActionScript 3 with Flash. The software powered an interactive floor featured at a top local radio station, interactive bars at a large dance event, and referenced in several papers and PhD Theses.

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CRYPTO/WEB3 EXPERIENCE

LEAD DEVELOPER
2021 - Present

Cryptwire

We produce insights, analytics and optimisations for cryptocurrency trading bots.

My responsibilities are:
1. Architect the entire platform
2. Implement backend services in Go
3. Implement the frontend in Angular
4. Implement GraphQL API in Nodejs
5. Integrate with Exchange and Bot APIs

More information and demo account available at
donovansolms.com/project/cryptwire

Website
cryptwire.net

SENIOR DEVELOPER
2018 - 2021

Scala cryptocurrency

I joined the open-source cryptocurrency in 2018 as a developer working on the core node software and tools for the ecosystem around the currency.

My responsibilities were:
1. Add IPFS and ZeroNet capabilities to the core node software
2. Implement a distributed blockchain downloader
3. Implement a user-friendly miner for multiple platforms
4. Releasing builds and supporting our users

More information available at
donovansolms.com/project/scala-miner

Website
scalaproject.io

PERSONAL
2022

Deployed on
Binance Smart Chain
Avalanche
Fantom

DEX arbitrage bot

To keep up-to-date with technologies I'm interested in I regularly take on projects to explore a specific area. To deeply understand the workings of Uniswap V2-like exchanges I built an arbitrage bot using Go and Solidity.

Areas touched during the project:
1. Extracting trades and events from the blockchain in real-time
2. Understanding and calculating prices in a Uniswap exchange
3. Efficiently finding opportunities between multiple chains and exchanges
4. Writing, testing and deploying my own flash-swap Solidity contract
5. Interacting with the blockchain from Go

WEB2 EXPERIENCE

CHIEF TECHNOLOGY OFFICER
2020 - Present

Dr Derma

Dr Derma enables dermatologists to operate a medical-grade online practice.

My responsibilities are:
1. Architect the entire platform
2. Ensure regulatory compliance of the platform
3. Gather user feedback and implement new features
4. Define technology and feature roadmap
5. Define and optimise processes for our remote-only team

More information available at
donovansolms.com/project/drderma

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WEB2 EXPERIENCE *continued*

CHIEF TECHNOLOGY OFFICER
2017 - 2020

iLiveIt

iLiveIt is a leader in delivering personalised customer experiences at scale with a focus on personalised video messaging.

My responsibilities were:
1. Architect and guide development on the next-generation video personalisation service
2. Expand and mentor the development team
3. Provide guidance on international product rollouts from a service and implementation perspective
4. Work closely with top clients to understand their needs and deliver solutions to their customers
5. Build proof-of-concept projects to determine feasibility for the business

More information available at
donovansolms.com/project/personalised-video

Website
iliveit.com.au

SENIOR SOFTWARE ENGINEER
2014 - 2017

iLiveIt *continued*

Before being promoted to Chief Technology Officer at iLiveIt in 2017, my responsibilities were:

1. Architect and implement a new client-facing API for interacting with personalisation services
2. Implement scalable data processing pipelines for mobile network clients
3. Maintain and enhance the core messaging services

More information available at
donovansolms.com/project/electronic-bills

Website
iliveit.com.au

PUBLICATIONS

2009

MULTI-TOUCH HANDBOOK

Donovan Solms, Seth Sandler, et al

This book aimed to provide an introduction to the multi-touch world for everyone. It further included sufficient information to serve as a general "handbook" for those acquainted with the field, including code examples, suppliers, and building methodology. I contributed two chapters to the book.

EDUCATION

BIS MULTIMEDIA
2006 - DNF

UNIVERSITY OF PRETORIA

The purpose of this qualification is to enable students to understand the necessary concepts to build multimedia products using software engineering and visual design.

BACHELOR IN INFORMATION TECHNOLOGY
2005 - 2006

UNIVERSITY OF PRETORIA

The goal of the degree is to prepare a well-rounded information technologist proficient in software engineering, managing information as well as philosophy and mathematics.

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AWARDS

2009
Mobile Marketing Association

Mobile Marketing Award for Best Mobile Display

In an era before responsive web design, it was needed to craft experiences for users on specific display sizes. For Livemobile Football we implemented a near real-time "mobisite" for keeping track of nine of the world's biggest football competitions.

This award was specifically aimed at the user interface we created for a range of devices that kept data usage low and user engagement high.

The official winner announcement page
mmaglobal.com

INTERVIEWS

IPFS
2021

Meet IPFS

In this interview with the Scala cryptocurrency development team, we explore how we used IPFS to secure a blockchain from attacks such as the notorious 51% attack.

We also explain why libipfs was created to interact with IPFS from C++ via Go.

Interview via IPFS on YouTube
youtube.com

More information on libipfs at
donovansolms.com/project/libznipfs

Oracle
2019

Scalability of personalised video generation on Oracle Cloud

In this interview with Ross Dawson (Futurist and Entrepreneur), we discuss how we tested the performance of the Oracle Cloud against other vendors and why we ended up moving to Oracle's services for personalised PDF and video generation.

Interview via Oracle.com
oracle.com