Contact

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Top Skills

Leadership

Training

Community Outreach

Languages

Dutch (Limited Working)

Afrikaans (Native or Bilingual)

English (Native or Bilingual)

Certifications

Python Essentials 1

Foundational C# with Microsoft

Network Defense

Python Essentials 2

Jurgens Krause

Network Architect | Self-taught IT Generalist | AI & Python Developer | Advocate for Under-Resourced Communities
Nhlangano, Shiselweni, Eswatini

Summary

For 20+ years I've worked on bridging the digital divide, from maritime satellite links on the high seas to solar-powered wide area networks in rural Eswatini.

Primarily self taught, I learn by doing. With a breadth of experience that stretches beyond just network administration, I have built custom systems for the ground up in some of the most constrained environments imaginable.

Today I'm on a mission to redefine myself as an AI augmented Python developer, offering consulting services primarily in the EU Healthcare sector.

My passion has always been to live out my Christian faith in a way that makes a tangible impact in the lives of those around me.

Experience

Bitweaver Consulting
Company Owner
April 2024 - Present (1 year 3 months)
Mpumalanga, South Africa

I founded my own company in 2024 to allow me to do contract based work as well as consulting.
My primary client is a healthcare administrative automation startup based in the Netherlands.

Pasture Valley Children's Home
IT and Facilities Manager.
March 2016 - Present (9 years 4 months)
Nhlangano, Shiselweni, Eswatini

At Pasture Valley Children's Home I wore four hats: IT Manager, Network Architect, Facilities Manager, and Pastoral Care partner. Overseeing many

aspects of life at the orphanage. I designed, deployed, and maintained a microwave wireless network serving 50+ users across a widely distributed campus as well as built a monitoring system for both the network and a solar plant. Simultaneously, I managed all facility maintenance—electrical, plumbing, carpentry, painting—ensuring a safe, well-kept environment with zero major incidents. Beyond the technical and physical infrastructure, I partnered with leadership to mentor children through digital-literacy workshops and one-on-one support, empowering both staff and students with the skills and confidence to sustain and extend these systems long after my tenure.

Jenny Internet cc
Network Associate
April 2016 - April 2024 (8 years 1 month)
Newcastle Area, South Africa

As a Network Associate with Jenny Internet, I worked remotely to monitor and support a wide-reaching wireless ISP network across South Africa. My primary responsibility was network monitoring, keeping a close eye on system performance, identifying issues, and coordinating on-site technical teams to respond quickly and effectively.

Beyond monitoring, I frequently provided remote assistance for network infrastructure maintenance, helped configure routers for new wireless high sites, and coordinated repairs for critical equipment in remote and often hard-to-reach locations.

I regularly worked with technologies such as Mikrotik routers, Ubiquiti wireless gear, and OSPF routing protocols, managing everything from wireless backhaul links to VOIP systems. The role demanded a solid technical foundation, fast decision-making, and a collaborative approach to problem-solving across dispersed teams.

This position honed my ability to stay calm under pressure, communicate clearly across technical and non-technical stakeholders, and support robust infrastructure in a dynamic and evolving environment.

Wipronet
Network Administrator
January 2012 - March 2016 (4 years 3 months)

Managing wireless backhaul links,
Managing Asterisk Voice-over-IP servers,

Managing backbone routers,

Field technician scheduling,

Web Design,

Marketing Design

Qumi Homes
Network Administrator
January 2010 - December 2015 (6 years)

For six years, I served as the IT lead for Qumi Homes, a non-profit organization dedicated to the care of individuals with intellectual disabilities. Upon returning to South Africa in 2010, I took responsibility for their entire computer and communications infrastructure, supporting both operational efficiency and the staff's ability to deliver essential care.

My experience in building the network directly resulted in my first full time job at Wipronet!

My work included managing a multi-site network that connected eight facilities via a central wireless high site. I implemented and maintained an Asterisk PBX system for Voice over IP communication, handled web hosting, and provided hands-on technical support to end users across various locations. I also oversaw off-site backups and established VPN connections to ensure secure, reliable access to shared resources.

This role required a practical blend of problem-solving, strategic planning, and empathy—ensuring that technology served the mission, not the other way around.

Infokerk
Website Developer
April 2011 - December 2011 (9 months)
Pretoria Area, South Africa

Freelance website designer and developer for Infokerk.
Client required a website that integrated with his existing client management systems, as well as handle product activation for his existing products.

Airshed Planning Professionals
Driver
January 2010 - December 2011 (2 years)

While looking for full time employment I worked as a contract driver to collect air quality samples from remote monitoring sites at mines and power stations.

Council for Scientific and Industrial Research (CSIR)
Web Development
July 2011 - November 2011 (5 months)

The CSIR developed a system for collecting Indegenous Knowledge from traditional sources. I was brought in as a freelancer to create a PHP/MySQL/HTML4 and CSS based frontend to browse the collected information.

Operation Mobilization
4 years

Network Administrator
January 2008 - December 2009 (2 years)
International

For two years, I served as the Network Administrator aboard the MV Doulos, a Christian humanitarian outreach ship that traveled globally, bringing aid, education, and hope to communities in need. Living and working alongside an international crew from over 50 nations, I maintained the ship's complex IT infrastructure while also contributing to its mission in more public and pastoral ways.

On the technical side, I managed satellite uplink communications, oversaw Active Directory services, configured Squid Proxy servers, and provided end-user support across a diverse range of systems. I was responsible for bandwidth policy implementation, maintaining both wired and wireless networks, and delivering training and documentation to ensure smooth onboard operations.

Beyond the server room, I often stepped into the role of Master of Ceremonies, key speaker, and preacher, delivering sermons and speaking at both onboard and shore-based outreach events. Whether I was troubleshooting networks or speaking to crowds of hundreds, my time on the MV Doulos taught me how to lead with both technical confidence and genuine compassion.

Network Architect
January 2006 - December 2007 (2 years)
International

Network Design and Implementation
Proxy Server Configuration

Bandwidth Policies

Wired and Wireless Infrastructure

Scripture Union - Zimbabwe
Youth Worker
January 2004 - December 2005 (2 years)
Hwange, Zimbabwe

For two years, I served as a volunteer youth worker with Scripture Union in Hwange, Zimbabwe. My focus was on life skills training for teenagers, but the experience became so much more than a teaching role, it was a journey of mutual learning, cultural immersion, and personal transformation.

I lived with an Ndebele family, which gave me a firsthand experience of their rich culture, family life, and traditions. Being welcomed into their home offered me invaluable insight into community values, hospitality, and a way of life that was both grounded and deeply relational.

During this time, I led youth Bible studies, managed a local Christian bookshop, ran Bible clubs at five schools, and participated in frequent outreach events. Each responsibility called for adaptability, creativity, and strong interpersonal skills, particularly in navigating a multicultural environment with limited resources.

These two years significantly shaped how I approach leadership, communication, and service. I learned to work across cultural and language barriers, to teach and inspire with empathy, and to stay grounded in purpose, even when far outside my comfort zone.

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Education

Cullinan Combined
High School · (2000 - 2003)