

	<b>Timothy M. Nibert</b>	
	<b>Passionate software developer seeking new challenges and growth</b>	
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### KEY STRENGTHS

- Proactive and creative problem solver
- Excellent communicator
- Active seeker of knowledge

### TECHNICAL STRENGTHS

#### **Programming**

- Languages: Python, Rust, C/C++, C#, Java, Javascript, Go, Verilog, SQL, Bash
- Test Frameworks: Pytest, PyUnit, CppUnit, Junit, Mocha
- Distributed Systems and Web: Django, Flask, Web2py, Requests, Sockets, Paramiko, Spring, Node.js
- Multimedia: SDL, Godot, Piston, Allegro, FFMPEG, OpenCV
- UI: HTML, CSS, AngularJS, JQuery, Swing
- Build: Gitlab-ci, Travis-ci, Jenkins, Nuitka

#### **Linux and Infrastructure**

- 15+ years Linux experience
- Virtualization and Containers: VMware ESXi, Xen, Docker
- Server: NGINX, Apache, UWSGI, Gunicorn, AWS (S3, Glacier), Bahamut IRCd
- Database: PostgreSQL, MySQL, SQLite, SQLAlchemy, Diesel
- Monitoring: Monitorix, Collectd, Graphite, Glances
- Kernel Hacking

#### **Miscellaneous**

- Safety Critical Systems - IEC-62304/ISO-13485 Medical Device Software and Process
- Requirements Engineering
- Technical Writing
- Security Assessment and Malware Analysis
- Advanced TCP/IP Networking

## PROFESSIONAL HISTORY

**PaperCut Software**  
Product Engineer

Feb 2022 - Current  
Melbourne, VIC, Australia

Background:

PaperCut is an industry leader in print management. Product offerings include print management on a customer hosted server and print management in the cloud. I work on both offerings in the embedded software team. Technologies used include Java, Javascript, Spring, OSGi, SOAP, WebDAV, Hibernate, Jetty, Go, Google Cloud Platform, Typescript, React, and Edge Mesh.

Key Accomplishments:

- Developed embedded Java applications running on multifunction devices (MFDs)
- Built control systems to drive MFD workflows via manufacturer SOAP APIs
- Worked with technical support team to reproduce and fix field reported issues, specializing in device concurrency bugs
- Maintained legacy code bases
- Contributed to enhancing test protocols and requirements traceability

**Genea Biomedx**  
Software Engineer

Apr 2018 - Jan 2022  
Melbourne, VIC, Australia

Background:

Genea Biomedx develops biomedical devices for in vitro fertilization (IVF) laboratories. Products include embryo incubators, automated vitrification systems, and EMR integration. The embryo incubator I was instrumental on was crucial in the fight to save the northern white rhino from extinction.

Key Accomplishments:

- Spearheaded development of data migration software to facilitate management of embryo videos and development information for research purposes
- Debugged heavily concurrent distributed clients interacting with databases and APIs in a Model View Controller architecture
- Created remote scripting engine library reused across multiple projects
- Conducted interviews with key customers and transformed findings into customer needs, requirements, and verification/validation test documents
- Managed and automated engineering team tier 3 support workload and communications
- Automated complex field service procedures to reduce support costs

**Planet Innovation**  
Software Engineer, Tier 3 Support

Oct 2016 - Apr 2018  
Melbourne, VIC, Australia

**Background:**

Planet Innovation is an engineering consultancy developing biomedical devices. My project was a time lapse imaging in vitro fertilization incubator and supporting server application.

**Key Accomplishments:**

- Developed a hardware monitoring service for embedded Windows medical devices
- Reproduced and resolved numerous field reported software bugs
- Performed code reviews throughout Agile development cycle
- Worked with others to establish a world wide technical support infrastructure
- Authored comprehensive technical documentation
- Configured and managed JIRA service desk

**Iron Lotus Studios**  
Software Engineer

Feb 2016 - Current  
Melbourne, VIC, Australia

**Background:**

Iron Lotus Studios is a self established software development company specializing in games and web.

**Key Accomplishments:**

- Created reusable intellectual property
- Developed and maintained an online photo sharing platform
- Built a 3D tank battle game with online multiplayer
- Built a 2D arcade style space shooter game
- Deployed and maintained Debian Linux VPS infrastructure

**Abacus**  
Technician

May 2016 - Oct 2016  
Melbourne, VIC, Australia

**Background:**

Abacus Rent IT is a division of Abacus Calculators for computer and technology equipment hire.

**Key Accomplishments:**

- Managed a fleet of IT and AV equipment
- Implemented IT infrastructure for conferences and large events
- Repaired computers and commercial grade multi function printers

**Alchemy Events**  
Audio/Visual Technician

Oct 2015 - Feb 2016  
San Francisco, CA, USA

Background:

Alchemy Events provides sound and lighting to large social and corporate events. We created beautiful ambiance and threw amazing techno parties.

Key Accomplishments:

- Provided live audio streaming services
- Set up and struck music events
- Developed working knowledge of acoustics, audio technology, and lighting

**Tri Valley Computer Guru**  
Head Technician

Oct 2008 - Feb 2016  
Livermore, CA, USA

Background:

Tri Valley Computer Guru was a self owned company that addressed IT needs for home and business clients in the San Francisco bay area.

Key Accomplishments:

- Built, promoted, and operated an IT service business from the ground up
- Functioned as IT department for several small businesses on an ongoing basis
- Developed an IRC chat bot to translate languages in real time
- Installed a Hadoop cluster
- Provided on call service to ISP server facilities

**Bay Area Metal Scene**  
Chief Technical Officer

Mar 2008 - Sep 2008  
Pleasanton, CA, USA

Background:

Bay Area Metal Scene was a heavy metal music label sharing local San Francisco east bay area bands with the wider world.

Key Accomplishments:

- Developed company website using HTML, CSS, PHP, and MySQL
- Deployed in house OpenBSD/Apache server infrastructure

## PROJECTS

### **Geri/Geri Connect & Assess**

<https://www.geneabiomedx.com/Products/Geri>

Geri and Geri Connect are a distributed system designed to optimize in vitro fertilization patient outcomes. Geri is an embedded IVF incubator that creates time lapse video of embryo development. Geri Connect synchronizes this data through a heterogeneous distributed database and allows for manual or automated embryo viability assessment. It integrates seamlessly with a variety of external medical systems. Technologies used include Embedded Windows, Python, Debian Linux, VMware ESXi, Web2py, Flask, Celery, UWSGI, AngularJS, NGINX, PostgreSQL, SQLite, Docker, and FFMPEG (MP4).

### **Kill The Aliens**

<http://www.ironlotussoftware.com/kill-the-aliens>

Kill The Aliens is an arcade style shooter built with a custom game engine. It is a space themed vertical scroller with multiple levels.

### **Panzer Deathmatch 3D**

<http://www.ironlotussoftware.com/panzerdeathmatch3d>

Panzer Deathmatch 3D is an networked multiplayer tank battle game written in C# using the Godot engine.

### **PicPicPanda**

<https://www.picpicpanda.com>

Sample profile: <https://www.picpicpanda.com/space/drz/>

PicPicPanda is a photo sharing platform developed with Django featuring a website, REST API, console client, and unit test suite. It seeks to enable photo storage and sharing with the feel of real world photo albums. Finely configurable access permissions facilitate sharing photo albums with family and friends.

### **Abunai Bot**

<http://www.ironlotussoftware.com/abunai>

Abunai Bot is a multithreaded Internet Relay Chat (IRC) bot written in Python. Its purpose is to translate languages in real time for conversations between foreign language speakers.

## VOLUNTEER EXPERIENCE

### **BinrevNet**

Server Administrator

Installed, configured, and maintained a Slackware Linux server with Bahamut IRC daemon as part of the Binary Revolution IRC network.

### **Pycon AU**

AV volunteer

Recorded video of talks at Australia's annual Python conference.

## EDUCATION AND CERTIFICATIONS

University of the People Associate of Science in Computer Science Graduated with Honors	Online 2019 - 2021
SoftwareCPR IEC 62304 Medical Device Software Development Training	Melbourne, VIC, Australia 2018
CompTIA Network+ Certification	Melbourne, VIC, Australia 2016 - 2022
San Francisco State University Computer Engineering Deferred	San Francisco, CA, USA 2015
Chabot College GE, Biology Transferred with full credit	Hayward, CA, USA 2008-2015

## OTHER EXPERIENCE / INTEREST

Achieved rank of Third Degree Black Belt, Danzan Ryu Jujitsu

Citizenships: Australia, USA

Languages: English, Japanese

References available upon request.