# **BENNO RICE**

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#### **Profile**

Experienced principal engineer, architect, and manager. High level of experience developing in C and Python as well as experience with Rust, Javascript, Ruby, and ARM, PowerPC and x86 assembler. Experienced developer for kernel/embedded code as well as web applications and complex interconnected systems. Has managed teams and successfully delivered highly complex projects.

#### **Skills**

#### **Principal Engineer**

- Led design and development on several major projects.
- Worked across various stakeholder groups (engineering, product, security, management) to coordinate requirements, identify and solve issues.
- Mentored and encouraged other engineers, both at a code level and in finding and making the most of development opportunities.
- Highly effective communicator, both in meetings and in presentations.

# Software Architecture

- High- and low-level software design.
- Use and application of design patterns.
- Creation of software specifications.
- Presentation and communication of designs both to management and to other team members.

# Software Development

- Experience in C, Python, Rust, Ruby, Javascript, Swift, Go, Objective-C and ARM, PowerPC and x86 assembly.
- Kernel, device driver and embedded development.
- Web service and application development.
- Experience with AWS, Azure and Google Cloud.

# Management

- Managed teams of up to 11 people.
- Handled performance issues, both at the individual and team level.
- Been involved in recruitment, hiring and firing.

- Familiarity with software development life cycles and various project management methodologies.
- Planning out projects including time and resource estimation.
- Hardware and software vendor selection, testing and qualification.

### **Experience**

Principal Engineer, Yubico; Remote - July 2018 - April 2020

- Designed and led the development of cloud services to support YubiKey functions.
- Provided mentoring and leadership to other developers.
- Led several projects to develop and deploy replacements for online services.
- Architectural lead on a major project for large scale remote management of YubiKey fleets.

Senior Software Engineer, iXsystems; Remote – January 2018 - June 2018

- Improved and maintained FreeBSD for use in the FreeNAS and TrueNAS products.
- Provided architectural guidance and mentorship to others in the OS and Services team.
- Maintained an effective relationship with the FreeBSD developer community.

Senior Principal Software Engineer, Dell EMC (Isilon); Seattle, Washington

- July 2016 December 2017
- Architected and developed systems to provision test and development environments to support development of the Isilon OneFS platform.
- Worked between the tools and automation teams and other engineering teams to improve the testability and automation of OneFS platforms.
- Provided architectural guidance and mentorship to others in the tools and automation teams.
- Maintained an effective relationship with the FreeBSD developer community.

Manager, OS & Networking, EMC (Isilon); Seattle, Washington — July 2014 – July 2016

- Provided mentorship and guidance to team members.
- Provided technical leadership and determined both tactical and strategic plans for the areas under my control.
- Worked closely with the FreeBSD community to handle upstreaming our code and development of any needed features.

- Successfully delivered project to provide a significant (5+ years, 3 major versions) update to the underlying FreeBSD code of the product.
- Was heavily involved in development of next-generation products, including hardware vendor selection and qualification, software development planning and execution.

Principal Software Engineer, EMC Australia (Isilon); Melbourne, Australia — February 2013 – July 2014

- Architected and developed software in C and Python.
- Developed of project plans to achieve goals within time and resource constraints.
- Developed and maintained of a sophisticated derivative of the FreeBSD operating system.
- Provided technical assistance and guidance to other teams.
- Assisted with the diagnosis, triage and rectification of faults.

#### Other

- FreeBSD developer and committer since 2000
- FreeBSD Core Team member, 2016-2018
- Program Chair, PyConline AU 2020 & PyCon AU 2021
- Ordinary Council Member, Linux Australia 2020-present

## **Selected Presentations**

- "The Tragedy of systemd", Linux.conf.au 2019, <a href="https://www.youtube.com/watch?v=o">https://www.youtube.com/watch?v=o</a> Alw9bGogo
- "The New COBOL", PyCon AU 2019, https://www.youtube.com/watch? v=BCqGjGzWl48
- "A Brief History of I/O", Linux.conf.au 2018, https://www.youtube.com/ watch?v=qAhZEI\_6lbc
- "A Young Twitter Bot's Illustrated Primer (ebook)", North Bay Python 2017, https://www.youtube.com/watch?v=f7oJyU2iFhA&t=929s

#### References

Available on request.