Yunwei Wu

**Current Job**: Software Architect, BBSoC RCP **Location**: Hangzhou, China

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Professional Profile

* **Software architect** with **5** years of experience in **RCP CCS domain**. **Extensive experience** in building software for various cloud platforms.
* Successfully designed and deployed RCP CCS software in vRAN 1.0, vRAN 2.0, and vRAN 4.0, with a focus on **cloud-native architectures** for **enhanced flexibility and high availability**.
* Excelled in **designing and documenting** the comprehensive domain roadmap, blueprint and **uCCS roadmap**.
* Engaged in **advanced technology exploration**, consistently staying at the forefront of emerging trends and integrating cutting-edge solutions into projects.
* Expertise in containerized and Kubernetes based container management technologies, with a strong grasp of Kubernetes architecture. Skilled in Docker, Podman, CRI-O, Kubernetes and Helm charts, with **proven experience** in designing and implementing.
* Proficient in C/C++, Python and Shell Scripting with **10+ years** of software development experience and a strong background in developing efficient, high-performance software solutions and automating complex workflows.
* Aspiring to bring my extensive experience in **software architecture** to RCP Portugal team as a SW architect to further contribute to the organization's goals.

Strengths

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| --- | --- |
| ★ **Big Picture Perspective**  Possess a strong big picture perspective, considering the broader context and long-term effects in decision-making | ★ **Innovative Thinking**  Demonstrated innovative thinking in developing new solutions and processes |
| ★ **Collaborative Skills**  Adept at cross-functional collaboration, ensuring seamless communication and cooperation among different departments | ★ **Strong Communication**  Empathy in communication, actively listen |

Professional Experience

**Software Architect of BBSoC RCP CCS domain**

Jun 2019 - Now

**Primary contributor and designer** of uCCS, established the **overall tone** and WoW for the uCCS project.

* Recommended focusing on building **modular services** as the **primary** goal of project evolution, rather than adopting a microservices approach, to enhance **maintainability** and **flexibility**.
* Proactively identified and mitigated potential risks in **uCCS1.0 CI/CD**

**Recognized** **potential** issues related to uCCS CICD that could affect project progress.

**proposed a feasible uCCS1.0 CI/CD solution as the prototype of the final version by organizing 10** meetings and inviting various experts (BBP and RCP) to share **Comprehensive CICD solution**

* Strongly recommended **stopping the previously decided one-shot migration strategy** and highly suggested that we first **pick up some uCCS1.0-specific services and pick up common services in uCCS2.0**, thus **forming our current uCCS "cherry pickup" strategy**.
* Established a unified communication platform for different DU/BU to make one BTS possible, a unified architectural domain for all system components to make the build one BTS smoother, established a unified cloud-oriented platform and can evolve to cloud-native BTS more smoothly, and provide a more competitive platform for 6G.

**Innovative** designer of RANNIC control plane and troubleshooting solution, including E2E state management, log forwarding and fault reporting solutions

* Innovative design of RANNIC statement management solutions with auto-detection service that **combines cloud features (service discovery) and classic features (Syscom MSG) to manage RANNIC**.
* Proactively proposed a missing debugging functionality, finally designed RANNIC log solution by organizing **5 meetings** to elaborate the difference between log streams in cloud products and classic products.
* Creative design fault reporting solutions compatible with cloud features(event based) and classic features(message based)

**Proactively explored** future trends in cloud computing, diving deep into the observable domain, and successfully incubated a new service

* Keenly identified the shortcomings of cloud RAN observable capabilities
* Personally conducted proof-of-concept validation to demonstrate the feasibility of the solution
* **Designed and led** the development of a new service (metrics\_collector), collaborating with product managers and system architects to build a robust and scalable solution.
* **Promoted the solution** to external stakeholders by conducting demo sessions, interactive workshops, and leveraging slides and prototypes to effectively communicate its value
* **Successfully introduced and integrated the solution** into cloud TRH and classic TRH environments

**Clarifying technical requirements**, providing valuable technical analysis, proposing new solutions

* Participated kinds of meetings, **10+ meetings per week**. E.g. CFAM, vDU & cloud RAN architecture meeting, RASG, IDT, and so on.
* Presented new ideas or requirements, **10+ per year.** E.g. Statement Management for RANNIC, observability of cloud RAN
* Clarified technical requirements and described the interface and service usage, **5+ per month.**

**Actively take on** the role of Entity Feature Specification (**EFS**) author and Lead Entity Specification Engineer (**LESE**)

* **Pioneered** the design of the RCP CCS EFS module in DOORS, including designing the module outline and defining attributes for RCP CCS&MSG
* As an **EFS author** contributing **15 + features** work per year in RCP CCS domain. And as a **dedicated** **C&P** EFSauthor in the RCP CCS & MSG domains
* As a **LESE** of CB009095(traffic mirroring) and **CB009443**(RANNIC for vDU L3 call)

**Software engineer of RCP CCS domain**

Oct 2016 - Jun 2019

**Independently** handle all aspects of development for the following task

* **Creative** proposal, design and implementation of CCS plugins to resolve cross-platform deployment
* Developed a **high-performance** syslog solution for U-Plane applications, Consumption time reduced from 500us+ to <20us
* Developed a more **flexible** Troubleshooting Data Collection Service for L1 in vRAN2.0, changed the dependencies from API-based to message-based (picked by BBP UPHWAPI in uCCS1.0)
* As an FO and FDC author, led and wrote **20+ features**

Successfully designed and implemented RCP CCS software containerization as a FO

* Deliver the first version of CCS based images and reference helm charts
* Shared 5+ sessions on docker, Podman, Helm chart and Kubernetes knowledge

Education

Bachelor | 2009.6 | Tianjin Engineering Normal University| Major: automatization

Family

* I am a member of a family of three, consisting of my wife, my daughter, and myself.
* My wife is an international education advisor, fluent English skills and work from home.
* My daughter is a swimmer on the Hangzhou city team.

Achievement

* Tribal Award for four consecutive years (2019~2023)
* 2022 Business Excellence award
* IPR: NC325864(METHODS, SYSTEM AND EQUIPMENT FOR USING MULTIPLE FUNCTION NIC (NETWORK INTERFACE CONTROLLER) IN A KUBERNETES MANAGED SYSTEM)