FABRÍCIO CARVALHO

College of Computing, Federal University of Mato Grosso do Sul, Brazil

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EDUCATION

Ph.D. in Computer Science at UFMS, Brazil　　　　　　　　　　　**2018 – present**
Advisor: Ronaldo Alves Ferreira

M.S. in Computer Science at UFMS, Brazil　　　　　　　　　　　2012 – 2014
Advisor: Ronaldo Alves Ferreira
Thesis: *Construction of Causal Paths in Software Defined Networking (Portuguese)*

B.S. in Computer Science at UFMS, Brazil　　　　　　　　　　　2008 – 2011
Advisor: Marcelo Henriques de Carvalho
Thesis: *An Efficient Algorithm for Course Scheduling (Portuguese)*

SELECTED PUBLICATIONS

* **DWT in P4: Periodicity Detection in the Data Plane**
  B. R. Huaytalla, A. S. Jacobs, M. V. B. Silva, F. B. Carvalho, R. A. Ferreira, W. Willinger, L. Granville.
  IEEE GLOBECOM, 2022

* **Dyssect: Dynamic Scaling of Stateful Network Functions**
  F. B. Carvalho, R. A. Ferreira, Í. Cunha, M. A. M. Vieira, M. K. Ramanathan.
  IEEE INFOCOM, 2022

* **A Verified Session Protocol for Dynamic Service Chaining**
  P. Zave, F. B. Carvalho, R. A. Ferreira, J. Rexford, M. Morimoto, X. K. Zou.
  IEEE/ACM Transactions on Networking (ToN), 2021.

RESEARCH INTERESTS

Operating Systems

Programmable Data Planes

Kernel-bypass Technologies (DPDK, RDMA)

Network Function Virtualization (NFV) and Software Defined Networking (SDN)

TECHNICAL SKILLS

Fluent in Bash, C, C++, Rust, and Python

Advanced knowledge of Assembly x86, DPDK, and OpenFlow

REFERENCES

Ph.D. Advisor: Prof. Ronaldo Alves Ferreira　　　　B.S. Advisor: Prof. Marcelo Henriques de Carvalho
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Other references available upon request.