Jonatan Langlet

3rd Year PhD Candidate - Networking Systems

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Education

2020–Present **PhD, Networking Systems**, Queen Mary University of London
- Researching high-speed telemetry and streaming data processing through programmable networks
- Advisor: Dr. Gianni Antichi

2019–2020 **MSc, Computer Science**, Karlstad University
- Thesis: Offloading Virtual Network Functions–Hierarchical Approach
- Advisor: Prof. Andreas Kassler

2016–2019 **BSc, Computer Science**, Karlstad University
- Thesis: Towards Machine Learning Inference in the Data Plane
- Advisor: Prof. Andreas Kassler

Work Experience

Mar-Oct 2022 **Research Fellow**, Harvard University
- Researching hyperscale streaming data processing systems through data plane programmability
- Advisor: Prof. Minlan Yu

2020–2022 **Lab Supervisor & Teaching Assistant**, Queen Mary University of London
- Teaching and grading in Distributed Systems

2019–2020 **Research & Teaching Assistant**, Karlstad University
- Researching programmable network data planes, working with industry on 5G core networks
- Teaching and grading in Data Structures & Algorithms

2011–2016 **Owner/Developer**, Tanapps
- Sole proprietorship with a main focus on web application development
- Installation and maintenance of a virtualization cluster for hosting clients' applications

2011–2013 **IT Technician**, Fouredge
- Server installation/maintenance with a main focus on Linux and virtualization
- Sysadmin consultant for clients, designing and maintaining IT environments
- Second line helpdesk support, troubleshooting server issues

Extra Courses, Certificates, and Awards

2022 **Brendan Murphy Prize winner**, The prize was awarded for my work on Direct Telemetry Access

2021 **NVIDIA DPU Course & Hackathon**, A crash course on a new programmable NIC

2020 **Xilinx Adaptive Compute PhD school**, A week-long course on FPGA development

2019 **Barefoot Academy BA-102**, A week-long course on programmable switches

2012 **ITIL Foundation Certification**

2011 **Cisco CCNA Discovery**

Publications

IEEE TMC 2022 **Hybrid P4 Programmable Pipelines for 5g gNodeB and User Plane Functions**, *Suneet Kumar Singh, Christian Esteve Rothenberg,* **Jonatan Langlet**, *Andreas Kassler, Péter Vörös, Sándor Laki, and Gergely Pongrácz*

ACM HotNets 2021 **Zero-CPU Collection with Direct Telemetry Access**, **Jonatan Langlet**, *Ran Ben Basat, Sivaramakrishnan Ramanathan, Gabriele Oliaro, Michael Mitzenmacher, Minlan Yu, and Gianni Antichi*

IEEE EuroP4 2019 **Towards Neural Network Inference on Programmable Switches**, **Jonatan Langlet**, *Andreas Kassler, and Deval Bhamare*