Philip Taffet

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EDUCATION

Rice University, Ph.D. Computer Science, Aug 2021 — GPA: 4.00
Techniques for Measurement, Analysis & Optimization of HPC Communication Performance

Rice University, M.S. Computer Science; May 2018 — GPA: 4.33
Understanding Congestion in High Performance Interconnection Networks Using Sampling

Rice University, B.S. Computer Science, B.S. Mathematics; May 2017 — GPA: 4.08
Summa Cum Laude, Distinction in Research and Creative Works

SKILLS

Languages and frameworks: C#, C++, Python, MPI, OpenMP, Java
Other technologies: Mathematica, Windows Server, Linux, Git, SQL, Vim
Language: Fluent in Spanish

EXPERIENCE

Jump Trading Research and Development Architect, *R&D Team* — 2021-Present

Jump Trading Production Engineering Intern, *Linux/R&D Teams* — Summer 2019
- Applied insights from my research to boost InfiniBand fabric performance
- Built and integrated tooling for proactively addressing fabric health issues

Lawrence Livermore Nat'l Lab Summer Student, *Livermore Computing* — Summer 2018, Summer 2017
- Designed, executed, and analyzed experiments to explore the impact of network locality and congestion on performance of parallel applications
- Research selected as best student poster finalist at SC 2017 conference

Chevron Corp. HPC Analyst Professional Intern, *Emerging Technologies Team* — Summer 2016
- Evaluated HPC performance analysis tools by creating a set of mini-programs that exhibit common performance issues
- Analyzed and suggested performance improvements to HPC applications

Microsoft Corp. Software Engineering Intern, *Azure Hyper-Scale Compute Team* — Summer 2015
- Designed, built, and integrated a browser-based status monitoring and management portal for Azure Service Fabric clusters
- Work featured in Day 2 Keynote presentation at BUILD 2016

ENTREPRENEURSHIP

Steward Technology, Inc. Co-founder — 2015-2018
- Co-founded profitable software startup delivering real-time press event analytics for the automotive public relations industry
- Interfaced with customers, participated in strategic planning, developed and integrated mobile and cloud applications

Windows Store Application Programmer — 2010-2012, Fall 2013-2018
- Created and published several apps for the Windows app store
- Over 75,000 total downloads and over $12,000 in revenue

SELECTED PAPERS AND POSTERS

P. Taffet, J. Mellor-Crummey, "Understanding Congestion in High Performance Interconnection Networks Using Sampling" at SC19

P. Taffet, J. Mellor-Crummey, "Lightweight, Packet-Centric Monitoring of Network Traffic and Congestion Implemented in P4" at HOTI 2019

P. Taffet, I. Karlin, "Understanding the Impact of Fat-Tree Network Locality on Application Performance" at SC17 SRC *Best Student Poster Finalist*

HONORS

- Invited Student at Salishan Conference on High Speed Computing, 2019
- Winner of Ken Kennedy Institute Cray Graduate Fellowship, 2018
- Senior Merit Award for Computer Science, Rice Engineering Alumni, 2017
- 51st place worldwide, ICPC World Finals programming contest, 2016
- 344th place nationally, W. L. Putnam Mathematical Competition, 2015