Mike Rooney

Education

- **University of North Carolina at Chapel Hill** — Chapel Hill, NC
  M.S. in Computer Science — *Aug. 2013 – Aug. 2016*
- **University of North Carolina at Chapel Hill** — Chapel Hill, NC
  B.S. in Computer Science — *Aug. 2009 – May 2013*

Experience

- **Microsoft** — San Francisco, CA
  Platform Lead for AKS (Azure K8s Service) — *Jan. 2021 – Current*
  - Improve reliability and performance of AKS customer control and data planes
  - Define and execute a roadmap to guarantee AKS continues to be the best in class managed k8s solution

- **Pluralsight** — RTP, NC
  Senior Instructor and Developer — *Jan. 2021 – Dec. 2021*
  - Lead the cloud platforms vertical
  - Managed a large pool of contract instructors to deliver the best classes possible
  - Developed standardized processes to provision virtual lab environments for all proprietary courseware
  - Refined the product roadmap and strategic positioning of Pluralsight's "Flow" product

- **Loopback LLC** — RTP, NC
  Owner and Founder — *June 2020 – Jan. 2021*
  - Acquired by Pluralsight
  - Development and delivery of innovative tech learning solutions customized for enterprise IT
  - Expert consultation for problems in the domain of cloud computing

- **Microsoft** — Seattle, WA
  Software Engineer — *Dec. 2017 – Sep. 2019*
  - Ensure public SLA for the Azure Storage Resource Provider service (control plane for all storage offerings)
  - Develop/maintain migration scheduler service (responsible for all internal data movement) and replication code
  - Drive initiative to automate the decommissioning process for last gen storage arrays

- **Self-Employed** — RTP, NC
  Solutions Architect and Instructor — *Jan. 2017 – Nov. 2017*
  - Performed as a solutions architect for RedHat to deploy, administer and develop atop their offerings catalog including OpenShift, Ansible Tower, JBoss middleware, etc.
  - Taught Google's Data Engineering courseware as a Google Cloud Platform Authorized Trainer
  - Development of bespoke VR experiences

- **NetApp** — RTP, NC
  Software Engineer — *Apr. 2015 – Jan. 2017*
  - Upstream API design and coding for Cinder (Block Storage) and Manila (Shared Filesystems)
  - Integrated NetApp hardware platforms into aforementioned OpenStack projects
  - Deployed and maintained internal CI/CD pipeline integrating NFS, iSCSI, and Fibre Channel systems

- **UNC-Chapel Hill** — Chapel Hill, NC
  Researcher and Teaching Assistant — *Aug. 2013 – July 2015*
  - Design of novel camera sensor, SPICE modeling of selected image sensor components, and behavioral synthesis of sensor network
  - Analysis of expected performance and establishment of worst case noise bounds

- **SpaceX** — Hawthorne, CA
  Security Engineer Intern — *May 2014 – Aug. 2014*
  - Emulation of commercial grade network processing units using GPUs

- **NVIDIA Corporation** Santa Clara, CA

  Tegra Security Intern *May 2013 – Aug. 2013*
    – Digital architecture work to add Elliptic Curve Cryptography functionality to a dedicated coprocessor
    – Investigation into mitigating differential power analysis side-channel attacks

- **GAMMA Group** Chapel Hill, NC

  Collaborator and Developer *Aug. 2012 – Dec. 2012*
    – Assisted in development of a multi-touch-enabled Android application that simulates virtual percussive instruments in real-time using physically-based sound synthesis

- **NSA** Fort Meade, MD

  Cryptologic Access Intern *May 2012 – Aug. 2012*
    – Developed custom analytics for large scale data processing
    – Employed MapReduce techniques for optimal parallelization
    – Produced critical workflows that queried disparate databases by automating the generation of complex selectors

Skills

Languages: Python, Rust, Go, Javascript/HTML/CSS, Assembly (RISCV,ARM,MIPS), Verilog, LaTeX

Software/platforms/frameworks: Azure, Google Cloud Platform, AWS, Kubernetes, TensorFlow, all of the major Big Data analytics tools, CUDA, Ethereum, OpenGL, LLVM & GCC, JVM, ROS

Hobbies

- Analog and Digital IC hacking
- Videogames (playing and making)
- Racing