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

- **Loopback LLC** RTP, NC
  Owner and Founder *Current*
  - Development and delivery of interactive workshops and other tech learning solutions customized for large enterprise
  - 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) & 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*
  - Subcontracted as a solutions architect for RedHat to deploy, adminster 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 – Jul. 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
  - Custom design of servers for real-time, in-line processing of very high bandwidth traffic

- **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
  - General research into interactive sound propagation using geometric and numerical methods

Skills

Languages: Python, Rust, C, C#, Javascript/HTML5/CSS3, Assembly (x86,MIPS,ARM), Verilog, LaTeX

Software: Azure, Google Cloud Platform, Kubernetes, OpenStack, AWS, TensorFlow, Hadoop, CUDA, OpenMP, OpenGL, Wireshark, Nmap, LLVM&GCC, JVM, Xen, ROS, Xilinx Vivado, LTSpice, kiCAD

Hobbies

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