SAMUEL RUSSELL

New York, NY | Current October 2024

WORK

Meta / Facebook   2019 - 2024
AR Input & Interactions (CTRL) Research ML Infra
- 2023 - 2024 IC7 / Tech-Lead
  - EMG modeling technology shown in 2024 Orion Neural Wristband demo
  - ML research infra for 300+ Researchers, 1000+ internal collaborators, $12mm/yr spend
  - Spanning & migrating across AWS & Meta ecosystems
  - Responsible for privacy, scale, reliability, & efficiency
  - Policy and Strategy lead for Design process, Reliability/SEVs, Oncall & Support policies
- 2021 - 2023 TLM / Tech-Lead-Manager
  - Managed 3-8 direct reports, hiring, career & performance
- 2019 - 2021 IC6 / Tech-Lead
  - Implementation and coordination of major infra projects
  - ML infra for data collection, refinement, training, analysis, and demo distribution

CTRL-Labs   2018 - 2019
- Cloud infra lead for AWS-based ML research platform supporting EMG-based neural interface research, demos, developer kits
- Startup (team & tech) acquired by Facebook in Nov 2019 for ~$0.5-1bb

Uber, Senior Software Engineer   2014 - 2018
- Observability (SRE)
  - In-House Metrics-Based Monitoring, Alerting, and Dashboard Systems
- Autonomous Vehicle Infrastructure
  - Cluster Job Scheduler and ES Optimizations, ML Model Storage Systems
- Core Services
  - Monolith to SOA migration. Designing high-scale User Service.
  - Multi-DC design & bring-up, security & fraud work.
  - Oncall and Outage mitigation. Triage and root-cause analysis
  - DB optimization & migrations from Postgres -> NoSQL Schemaless

Nvidia, Software Engineer   2012 - 2014
Graphics Performance-Power
- Algorithm design, implementation, and testing for multi-component SOC power scaling
- Test automation frameworks and data visualization
- Chip and Platform software bring-up and validation, power measurement configuration
- Special projects team for critical demos, design-wins, and customer release issues

EDUCATION

Carnegie Mellon University Pittsburgh, PA   2011 / 2012
BS & MS in Electrical and Computer Engineering
Minors: Neural Computation, Biomedical Engineering

SKILLS

Python, Go, C/C++, Javascript/Typescript, Java, others as needed
AWS, Databases (SQL and No-SQL), APIs, Services, Docker, Kubernetes
Machine Learning, Pytorch/Tensorflow, numpy/Scikit, data collection/processing/analysis

HONORS

Uber 2017 Hackathon Winner	CMU Dean's List
Eta Kappa Nu Honor Society	Boy Scouts of America: Eagle Scout & SPL

PROJECTS & HOBBIES

Android App & Game Design	Electro-Luminescent Wire Art
Live SF Transit Mapping	DAF Foundation work