

# Brian Hungerman

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## EXPERIENCE

**Senior Software Engineer @ Applied Sciences (Microsoft)** Jan 2025 – Present  
• Incubating novel A.I. user experiences with collaboration across W+D, MSR & ID.  
• Developing full-stack functional prototypes across web & mobile platforms.

**Software Engineer @ A.I. Platform (Microsoft)** Jan 2020 – Jan 2025  
• Shipped **Online Endpoints** to 50+ regions for **Azure OpenAI, Copilot, Office & 3p**.  
• Scaled cloud infrastructure to serve trillions of inferences/month w/ 6 9's **SLA**.  
• Optimized **Network Address Translation** to reduce **COGS** by \$10 million/year.  
• Completed security, privacy & component governance audits as **Security Champ**.  
• Spearheaded livesite process improvements via **TSGs & SOPs** as **DRI Champ**.  
• Implemented **Envoy Proxy** build pipeline w/ **Bazel** & custom **C++** filters, e.g.:  
  • **SHA-256 Key-Based Authentication (KBA)** filter w/ **CORS** preflight support.  
  • **Azure Active Directory (AAD)** authentication filter w/ **LRU** decision cache.  
  • **Global Rate Limiting** filter w/ **Go** microservice to pub/sub to **Redis** cache.  
• Set up runners & telemetry pipelines in **Azure Data Explorer, Kusto & SQL**.  
• Shipped **PowerBI & Grafana** dashboards to track platform metrics & logs.

**Software Engineer Intern @ A.I. Platform (Microsoft)** May 2019 – Aug 2019  
• Designed **Jupyter** notebook CI pipeline w/ **Azure DevOps, ML SDK & Functions**.

**Software Engineer Intern @ Ventana (Roche)** May 2018 – Dec 2018  
• Pushed feature-adds & bug-fixes for **MEAN** stack digital pathology web app.  
• Prototyped **OpenSeaDragon**-esque image renderer & annotator in **PixiJS**.  
• Modernized **Nagios** server monitoring w/ **Icinga, Graphite & Grafana**.

**Director @ HackMerced IV (MLH)** May 2018 – May 2019  
• Hosted non-profit collegiate hackathon for 300 students, fundraising \$20,000!

**Web Developer @ CITRIS & Banatao Institute (UCM)** May 2017 – Dec 2018  
• Developed **GitOps** content management system (**CMS**) via **jQuery & CSV** files to replace **Drupal CMS**, hosting via **GitHub Pages**: <https://citris.ucmerced.edu>.

**Instructor @ Summer of Game Design (MVHS)** Jun 2015 – Jul 2016  
• Co-founded non-profit game programming summer camp, fundraising \$25,000!

## RESEARCH & EDUCATION

**Bachelor of Science @ University of California, Merced** Aug 2016 – Dec 2019  
• Computer Science & Engineering, *magna cum laude* (GPA 3.74)

**Lead Research Assistant @ VICE Lab (UCM)** Aug 2018 – Dec 2019  
• Led team to develop heuristic & **ML** scripts in **Google Earth Engine** to model & predict California's agricultural fallowing via Earth observation satellite data.  
• Onboarded lab to **GitHub** & wrote open-sourced scripts in **Python, C# & R**.  
• Refurbished lab's website, hosting via **GitHub Pages**: <https://vicelab.net>.

**Research Assistant @ ANDES Lab (UCM)** Jan 2019 – May 2019  
• Visualized **InfluxDB** data for HVAC predictive control system in **Python, Grafana**.

**Research Assistant @ SAIL + MACES (UCM & NASA MUREP)** Aug 2017 – May 2018  
• Debugged code to 3D-print **Fermi** surfaces via **Marching cubes** in **Fortran90**.

## SKILLS

<b>Languages</b>	years
C / C++ / C#	8
Python	6
JavaScript / TS	4
Golang / Rust	2
Java / Kotlin	2
<b>Frameworks</b>	years
Azure / .NET	6
MEAN / MERN	2
LAMP / Drupal	2
<b>Programs</b>	years
Unity3D	8
Docker / K8s	4
Android Studio	2

## PROJECTS

**Iterate**  
"Code Mobilized"

**BitNaughts**  
"Code Gamified"

**MARP**  
"..."

## AWARDS

**Microsoft Hackathon '20**  
*HackADuo Finalist*

**ValleyHacks '19**  
*First Place*

**SLOHacks '19**  
*Best Google Cloud*

**Mobile App Challenge '18**  
*\$2,000 Finalist Prize*

**CitrusHack '18**  
*Third Place*

**SDHacks '18**  
*Third Place*

**SacHacks '18**  
*Second Place*

**HackDavis '18**  
*Best Environment*

**HackFresno '18**  
*Best Hardware*

**Mobile App Challenge '17**  
*\$5,000 Grand Prize*

**HackMerced '17**  
*Best Design*