

# Shrinath Rao

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**Outgoing, passionate, and hardworking engineer and designer with a flair for creative programming**

Website: <https://shrinathrao97.github.io/>

## Experience

### **Uhnder Inc., Austin, TX — Visualization Engineer** Nov 2020 - Present

*Disruptive startup bringing radar to the masses with Digital Automotive Radar-on-Chip*

- Designed, implemented, and delivered innovative and robust features for ROS data visualization and demos in custom tool "ProViz"
  - Responsible for delivering ProViz releases to a global customer base
  - World-class 3D visualizer for radar and ROS data in a browser setting using regl, React, Node.js and Worldview
  - 3D point cloud data projection onto 2D camera streams to visualize real-world data
  - Implemented map tiling server with a CDN, appropriate shaders, and buffering for visualizing GNSS based map data
  - Built first browser-based ROS bridge record and ROS bag editor and annotator within ProViz using cutting edge file system API with chrome web workers
  - Built a custom camera scripting language using JSON commands for demos
  - Setup Jenkins CI/CD pipeline for team
- Gained experience and expertise with AWS tools and hosting to deliver application to a global customer base
  - CloudFront CDN, load balancing, and Geolocation based routing
- Analyzed and handled large ROS bags and field sensor data using ROS stack
- Owned and delivered internal visualization tool for radar and system validation
  - Development in QT
  - Setup and delivered CI/CD pipeline for project
  - Project management and process compliance

### **Cadence Design Systems, Austin, TX — Intern** June - Sept 2020

*Leader in EDA and Intelligent System Design delivering hardware, software, and IP for electronic design*

- Expanded skill related to CI and testing
- Setup and maintained Buildbot for daily DFT testing
- Interfaced with a build farm using Python/asyncio and Perl to optimize DFT testing
- Acquired experience with RHEL and Linux tools
- Worked in a large legacy C++ codebase
- Gained exposure to multi-threaded programming

## Education

### **Bachelor of Science**

*Computer Science*

*University of Texas at Dallas*

*December 2019*

### **Bachelor of Arts**

*Arts, Technology, and Emerging Communications (ATEC)*

*University of Texas at Dallas*

*December 2019*

### **4+ Years Japanese**

*Japanese American Society of Greater Austin*

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## Skills

### **Hard Skills and Tools:**

- C++/C, C#, Java, Python, Perl
- HTML, CSS, JavaScript, React, WebGL, regl
- QT
- Unity, Unreal Engine
- Unix + Developer tools
- Maya and Blender
- Photoshop, After Effects, Premiere
- AWS & Cloud Services
- Git, Bitbucket, Mercurial
- Jira and Project Management tools and flow

**Axxess Technology Solutions Inc., Richardson, TX — Intern** Aug - Dec 2019

*Leading global technology innovator for healthcare at home solutions*

- Developed APIs to integrate home health applications to cloud database servers
- Used RESTful API in a CQRS pattern with Entity Framework and Linq in C#
- Managed sprint, planning, and validating task completion and communicating updates
- Owned delivery and integration of the team's API used in the Axxess stack

**Uhnder Inc., Austin, TX — Intern** May - Jul 2017

*Disruptive startup bringing radar to the masses with Digital Automotive Radar-on-Chip*

- Responsible for chip testing
- Assisted in chip bring up, validation and characterization of new silicon
- Built a radar module farm for remote developer access and Jenkins interface for Continuous Integration testing
- Implemented API to interface with Thermostream for temperature and voltage tests
- Created shmoo plots and data visualizations for data analysis
- Hands on experience with soldering and other lab work

*References and recommendations available on request*

**Some Projects:**

- Third person multiplayer shooter in Unity using C# and PhotonPUN2
- Unity C# platformer using LWRP and FFXIV's Ninja Mechanics
- Recreation of FFXV Warp Strike in UE4 (C++)

**Hobbies and Life Interests:**

- World Travel
- Boxing (3 years, Amateur Tournaments)
- Brazilian Jiu Jitsu (2 years)
- Languages (Kannada, Japanese and more...)
- Game Design and Graphics
- Music (Vocals & Guitar, Indian classical, Blues and Jazz)
- Skiing

**Others:**

- U.S Citizen
- Overseas Citizen of India
- Open to relocation including international