### **Nick Strohmeyer**

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Education

M.S. Electrical & Computer Engineering, University of Te xas at Austin

Jun 2022 - Present

GPA: 3.95

B.S. Mathematics, University of San Francisco

Sep 2016 - Dec 2018

GPA: 3.74, Magna Cum Laude

Minor in Philosophy

## Professional Experience

### **Software Engineer Intern,** Johns Hopkins APL — Laurel, MD

May 2023 - Aug 2023

- Wrote continuous time PDE-solver-based path planner for autonomous motion planning application as a modular, shareable cpp package
- Created python applications for GPS data visualization, probabilistic planning and network analysis

### Data Scientist Intern, Empower — Greenwood Village, CO

Jun 2021 - Aug 2023

- · Designed and developed interactive, executive-facing dashboards end-to-end for kyey operational insights
- Developed automation scripts to eliminate tedious data entry and emailing system and streamlined my manager's workflow

### **Data Insights Engineer, Spectrum — Greenwood Village, CO**

Jul 2021 - Jun 2022

- Leader of several critical metric inflations analyses leading to production patches and stabilized metric data during rollout of new app designs
- Developed python scripts and dashboards which created original insights into maintenance of backlogged analytics issues
- Wrote automated testing scripts and jira documentation to verify correctness of data point implementation and to share key design features across teams

#### **Digital Marketing Analyst**, Quinstreet — Foster City, CA

Jun 2019 - Oct 2020

- Optimized digital media campaigns contributing to over 150% growth with top three clients
- Led statistical analysis, data verification in A/B tests for a key proprietary site generating growth in user engagement and site revenue
- Built automated dashboards and forecasting tools using tableau, sql, and excel

# Skills / Technologies

#### **Programming / Development**

Python, C/C++, Java, Matlab, Julia, Pytorch, Linux (Ubuntu), Docker, Git, Bash, Ros

### Analytics/ General

Excel, Tableau, Wireshark, Streamlit, No-Sql, Sql, RDBMS, MS Office/ Power Apps /Sharepoint

# Selected Projects

### Semi Autonomous Framework for Surgical Application (ICRA 2024)

Jan 2023 - Present

• Our system learns real-time policies for deformable tissue manipulation in the context of minimally invasive robotic surgery (MIRS) using computer vision and online optimization methods

### **Gaussian Splat Compression (Course Project)**

Fall 2023

• We used an autoencoder-inspired novel design to reduce file sizes for compressed 3D scene rendering

### **Manipulator Control Module (Course Project)**

Spring 2023

• Implemented forward kinematics and jacobian optimization using screw theory for manipulator conrol

### **Video Driven Autonmous Racer (Course Project)**

Spring 2023

• We designed a video processing pipeline using opency to autonomously navigate a racing simulator

### Activities

### Teaching Assistant, UT Austin Cockrell School of Engineering

Aug 2022 - Present

Graduate Research Assistant, UT Austin Cockrell School of Engineering

Jan 2023 - Present

**UT Ice Hockey,** American Collegiate Hockey Association

Sep 2022 - Present

### **Awards**

### Dr. Brooks Carlton Fowler Graduate Fellowship

Sep 2023

Al F. Tasch, Jr. Memorial Endowed Graduate Fellowship

May 2023

**UC Regent's Scholar** 

Sep 2014