

## Portfolio GitHub LinkedIn Karthik.iyer2@yandex.com | kiyer@ch.iitr.ac.in

# **EDUCATION**

#### **IIT ROORKEE**

B.Tech Chemical Engg. WITH MINORS IN COMPUTER SCIENCE & Engg.

2017 - 2021 | CGPA: 8.907

# SKILLS

#### **LANGUAGES**

C/C++ • Java • Python • Swift

#### FRAMEWORK/LIBRARIES

- OpenTimelineIO PySide2/PyQt
- Basic OpenGL Spring Boot Kafka
- Android Java Framework

#### **SOFTWARE/TOOLS**

- Git CMake Oracle SQL Developer
- Firebase Blender
- Adobe Premiere Pro
- Adobe After Effects

## **ACCOMPLISHMENTS**

- Our team stood first in Productathon E-Summit 20' at IIT Roorkee
- Our team stood third in Hack in the North 4.0 at IIIT Allahabad
- Our team was among the top 10 in InOut 6.
- Secured first position in AIST Real Steel Video Contest
- Qualified for KVPY Scholarship with an All India Rank of 618
- Short Course in Film Appreciation by FTII

# REFERENCES

#### Nick Porcino

Sr. Engineer Tools: Story and Editorial Pixar Animarion Studios Emeryville, California nick.porcino@gmail.com

#### **Brad Larson**

Software Engineer Google Madison, Wisconsin larson@sunsetlakesoftware.com +1 (608) 320-9534

## **EXPERIENCE**

#### JPMORGAN CHASE & CO.

SOFTWARE ENGINEER

July 2021 - Present | Mumbai

• Working on Spring Boot microservices

#### VIGA ENTERTAINMENT TECHNOLOGY

COMPUTER GRAPHICS ENGINEERING INTERN

January 2021 | Remote

• Worked on texture extraction from polarized images, and explored 3D reconstruction from stero images.

#### **GOOGLE SUMMER OF CODE**

## ACADEMY SOFTWARE FOUNDATION | SOFTWARE DEVELOPER

June 2020 - August 2020 | Remote

Significant contributions to OpenTimelineIO during and after GSoC.

• Implemented predicates from Allen's Interval Algebra. Wrote C and Java bindings for the C++ core of the library, an SVG adapter and the first version of CI automation using GitHub actions.

### JPMORGAN CHASE & CO. | SUMMER INTERN

June 2020 - July 2020 | Remote

- Developed a POC for conversion between Indian Sign Language and English.
- Developed a REST API using flask and an Android app.

# **GOOGLE SUMMER OF CODE** TENSORFLOW | SOFTWARE DEVELOPER May 2019 - August 2019 | Remote

• Developed a cross-platform DataViz library in Swift, with AGG & SVG rendering backends & added a graphics output library to swift-jupyter using pure Swift.

#### UNDERGRADUATE TEACHING ASSISTANT

ACADEMIC REINFORCEMENT PROGRAM - IIT ROORKEE January 2018 - May 2019

• Undergraduate Teaching Assistant for Fluid Dynamics. Mentored 30 students for the course throughout the semester.

## **PROJECTS**

#### **RAYTRACER**

- A simple C++ Path Tracer for learning. Based on Raytracing in One Weekend series and PBRT.
- Implemented multithreaded and tiled rendering, mesh loading using assimp and denoising using OpenImageDenoise.

## OFFICIAL SECURITY APP OF IIT ROORKEE | TEAM LEAD

July 2020 – April 2021 | Roorkee, India

- Lead the development of the security app for IIT Roorkee.
- Digitized the logging of entry into campus and other checkpoints on campus.

# **LEADERSHIP**

- Head of Technology & Developer and Mentor @MDG IIT Roorkee
- Video Editor @CineSec IIT Roorkee