

# Shreyas Nisal

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## EXPERIENCE

### HEARTY ADVENTURES IN FOOD AND PLAY LAB | RESEARCH INTERN

Mar 2023 – Jul 2023 | PI: Dr. Rohit Ashok Khot

- Developed a smartphone game designed to encourage real-world activities that support human gut health
- Contributed to the design of the app in accordance with the research goals

### TWILIO | SOFTWARE ENGINEER

Aug 2022 – Feb 2023

- Working in the Auth team on the Role-Based Access Control (RBAC) platform
- Developing an internal tool and API endpoints that can be integrated with other Twilio products

### MIT MEDIA LAB | RESEARCH INTERN

Feb 2022 – Jul 2022 | PI: Prof. Pattie Maes

- Worked with the Fluid Interfaces group on the Joie project for anxiety management using Affective Brain-Computer Interfaces
- Designed and developed a neurofeedback training protocol using electroencephalography

### EXERTION GAMES LAB | RESEARCH INTERN

May 2021 – Jan 2022 | PI: Prof. Florian 'Floyd' Mueller

- Explored Electrical Muscle Stimulation (EMS), a body actuating technology, for novel interactions between users and systems
- Designed social bodily games using EMS to study shared agency between multiple users and the EMS system

### TWILIO | SOFTWARE ENGINEERING INTERN

Jun 2021 – Jul 2021

- Contributed to the Role-Based Access Control (RBAC) platform using the vaadin framework
- Developed API endpoints for the access manager service (XMS)

## PUBLICATIONS AND PRESENTATIONS

### UIST 2023 FULL PAPER

Joie: A Joy-Based BCI

### UIST 2023 DEMO

Demonstration of Joie: A Joy-based BCI with Wearable Skin Conformal Polymer Electrodes

### CHIPLAY 2023 FULL PAPER

Fused Spectatorship: Designing Bodily Experiences Where Spectators Become Players

[ACM DIGITAL LIBRARY](#) | [YOUTUBE](#)

### CHIPLAY 2022 WORK-IN-PROGRESS

TouchMate: Understanding the Design of Body Actuating Games using Physical Touch

[ACM DIGITAL LIBRARY](#) | [YOUTUBE](#)

### INVITED SPEAKER

QTalks about Quantum Games, QTurkey (Dec 2020):

Gamifying Quantum Computation

[YOUTUBE](#)

### INVITED SPEAKER

National Conference of Association of Otolaryngologists of India (Jan 2020)

VTalk, An App for the Deaf

## PROJECTS

### QLOGIC | [GOOGLE PLAY](#)

Quantum computing puzzle game developed in React Native

### SPEECH PROGRAMMER | [GITHUB](#) |

[YOUTUBE](#)

Open-source web application to convert speech commands to C code

### MEDNET OUTREACH | [GOOGLE PLAY](#) |

[APPLE STORE](#)

Telemedicine app developed using the Twilio Video API with the Mednet Labs team

### VOICE QUIZ | [GITHUB](#) | [YOUTUBE](#)

Voice-controlled quiz app developed in React Native

## EDUCATION

### SMU GUILDHALL

MASTER OF INTERACTIVE TECHNOLOGY IN DIGITAL GAME DEVELOPMENT (SPECIALIZATION: SOFTWARE DEVELOPMENT)

2023 - 2025

### BITS PILANI- GOA

B.E. COMPUTER SCIENCE

M.Sc. PHYSICS

2017 - 2022

## SKILLS

### LANGUAGES

C/C++ • Java

JavaScript • HTML/CSS

SQL • Python

### FRAMEWORKS

React Native • Flutter • MNE

• Vaadin Dropwizard • Spring

• Spring Boot • Swing/AWT • Bootstrap

### RESEARCH SOFTWARE

Neuroelectrics Instrument Controller (NIC2) • LabRecorder • Empatica E4 Streaming Server • PsychoPy

## TEACHING

### Teaching Assistant

#### Computer Programming

Mar 2021 - June 2021

Jan 2020 - May 2020

Jan 2019 - May 2019

### Teaching Assistant

#### Object Oriented Programming

Aug 2020 - Dec 2020

Jan 2020 - May 2020

### YouTube Tutorials

Linux Fundamentals • C Programming

Python • Object-Oriented Programming

React Native Windows • Verilog •

Theory of Computation • Compilers •

Game Development (Unity)