

# Shreyas Nisal

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## EXPERIENCE

### **TWILIO** | SOFTWARE ENGINEER

Aug 2022 – present

- 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 – July 2022 | PI: Prof. Pattie Maes

- Worked with the Fluid Interfaces group on the KALM 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

June 2021 – July 2021

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

### **HEXA BITCOIN WALLET** | REACT NATIVE INTERN

May 2020 – July 2020 | Remote

- Worked on the front-end of the Hexa Bitcoin Wallet
- Added functionality for QR scanning for bitcoin transactions

### **MEDNET LABS** | FULL-STACK DEVELOPMENT INTERN

Dec 2018 – May 2019

- Worked as the sole React Native developer on two apps
- Developed modules in Spring and Hibernate for self-registration kiosks at hospitals

### **MEDNET LABS** | FULL-STACK DEVELOPMENT INTERN

May 2018 – June 2018

- Developed a web-based voice assistant for hands-free filling medical examination forms
- Added customizable examination forms and a training module for pronunciation variations

## PROJECTS

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

Quantum computing puzzle game developed in React Native

### **SPEECH PROGRAMMER** | [DEMO](#) | [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

### **UNITY3D GAMES** | [GOOGLE PLAY](#)

Hypercasual games for handheld devices

## EDUCATION

### **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)

## PUBLICATIONS AND

## PRESENTATIONS

### CHIPLAY 2022 EXTENDED ABSTRACTS

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

### INVITED SPEAKER

QTalks about Quantum Games,

QTurkey (Dec 2020)

Gamifying Quantum Computation

### INVITED SPEAKER

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

VTalk, An App for the Deaf

## EXTRA-CURRICULARS

### Volunteer

Nirmaan Goa Chapter