

Shreyas Nisal

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EXPERIENCE

Exertion Games Lab, Monash University

May 2021 – present

Research Assistant

Remote

- Working on the affordances of Electric Muscle Stimulation (EMS) in HCI
- Studying the use of muscle stimulation to support declarative memory

Twilio

June 2021 – July 2021

Software Engineering Intern

Remote

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

BitHyve

May 2020 – July 2020

Intern

Remote

- Worked on the Hexa wallet app for bitcoin storage and transactions
- Added functionality for QR scanning for bitcoin transactions

Oakland Systems

Dec 2018 – May 2019

Intern

Remote

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

Oakland Systems

May 2018 – June 2018

Intern

Nagpur

- Developed a voice-controlled web application using JavaScript and the Web Speech API for hands-free medical examination forms
- Connected the application to a MySQL database using JDBC to store pronunciation variations

PROJECTS

QLogic | *React Native*

[Google Play](#)

- Developed a quantum computing puzzle game in React Native
- Published on Google Play and gained 2K+ downloads and a rating of 4.8 with 130+ reviews

Quantum Cryptography | *Qiskit*

- Simulated quantum key distribution algorithms (BB84, E91, B92) using qiskit

Quantum Games and Strategies | *Qiskit*

- Studied the applications of quantum techniques in game theory
- Simulated a quantum card guessing game using qiskit

Speech Programmer | *HTML, CSS, JavaScript, Web Speech API*

[Demo](#)

- Initiated an open-source web application to convert speech commands to C code

MedNet Outreach | *React Native, Twilio Programmable Video API*

[Google Play](#) | [Apple Store](#)

- Worked with the Oakland Systems team to develop multiple apps for telemedicine
- Integrated video calling in the apps using the Twilio programmable API

VTalk | *React Native, Android Speech Recognition API*

[Google Play](#)

- Developed a react native app to facilitate communication between deaf people and speaking-hearing people
- Worked with a school for the deaf and the Ability Foundation (Chennai) for user testing

Voice Quiz App | *React Native, Android Speech Recognition API*

- Developed a quiz application in React Native
- Made the application completely voice controlled- the app speaks out the questions, and the user can answer by speaking

Unity3D Games | *Unity3D Game Engine, Google Play Services API*

[Google Play](#)

- Developed hypercasual games using the Unity3D Game Engine
- Published 3 games to Google Play and gained a total of 1.5K+ downloads and an average rating of 4.9 with 100+ reviews
- Developed a Virtual Reality Game using the Google Cardboard Plugin

TECHNICAL SKILLS

Languages: C, C++, Java, HTML/CSS, JavaScript, SQL, Python

Frameworks: React Native, Flutter, React, Node.js, Bootstrap, Spring, Spring Boot, Swing

EDUCATION

Birla Institute of Technology and Science, Pilani - KK Birla Goa Campus Aug 2017 - May 2022
B.E. Computer Science and Engineering, M.Sc. Physics

TEACHING EXPERIENCE

Teaching Assistant <i>Computer Programming</i>	Jan 2019 – Apr 2019
Teaching Assistant <i>Computer Programming</i>	Jan 2020 – Apr 2020
Teaching Assistant <i>Object Oriented Programming</i>	Jan 2020 – Apr 2020
Teaching Assistant <i>Object Oriented Programming</i>	Aug 2020 – Nov 2020
Teaching Assistant <i>Computer Programming</i>	Mar 2021 – June 2021

ACHIEVEMENTS AND HONORS

Speaker, National Conference of Association of Otolaryngologists of India (AOICON) Jan 2020
Topic: VTalk, An App for the Deaf

Speaker, QTalks on Quantum Games (Organized by QWorld, QTurkey) Dec 2020
Topic: QLogic, Gamifying Quantum Computing

TECHNICAL CONTENT

YouTube Tutorials Sept 2019 – Present

- Created [video series](#) on C Programming, Object Oriented Programming, Database Management, Theory of Computation, Python Programming, Verilog, React Native Windows
- Uploaded the videos on YouTube and gained 40K+ views

Medium Blogs March 2019 – Present

- Wrote 16 blog posts on technical topics on [Medium](#)
- Gained a total of 50k+ views and 30K+ reads