

1. CITIZENSHIP: Guyana**RESIDENCE:** Estonia**2. EDUCATION**

- Ph.D University of Tartu**, Computer Engineering 2023 - Present
Focus: Human-Robot Interaction (HRI) - Education & Social Robotics
Supervisor: K.Kruusamäe
- M.Sc University of Tartu**, Robotics & Computer Engineering 2021 - 2023
Thesis: “An Open Source Robotic Study Companion for University Students”
Advisors: K.Kruusamäe, S.Schumann, A.Luhtaru
Leadership Program; 146/120 ECTS
- B.Sc University of Guyana**, Computer Science 2016 - 2020
Thesis: “Investigating the Use of an Affective Robot to Aid Students with Learned Helplessness”
Overall GPA 3.6/4.0 | Major GPA 3.8/4.0
- CSEC Global Technology**, Physics & Chemistry 2012 - 2013
- CSEC Al-Ghazali Islamic Academy**, Business Studies 2006 - 2011
Valedictorian; Best Graduating Student; Head Prefect

3. RESEARCH INTEREST

Human-Robot-Interaction, Social Robots, Affective Computing, Educational Technology, Affective Robotics, Special Educational Needs

4. RESEARCH EXPERIENCE | PUBLICATIONS

- Designing Social Robots for Learning: HRI Participatory Design Workshop**
Co-Authors: M. Zorec, K.Kruusamäe Aug 2024
Conference: ICITL2024, DOI:10.1007/978-3-031-65884-6_22
- Open-Source Robotic Study Companion with Multimodal Human-Robot Interaction for Improving the Learning Experience of University Students**
Co-Authors: M. Zorec, K.Kruusamäe June 2024
Journal: MDPI Applied Science, DOI: 10.3390/app14135644
- XR Teleoperation Demo Development** Sept 2023
Co-Authors: M. Zorec, U. Norbistrath
Conference: iMETA 2023, DOI: 10.1109/iMETA59369.2023.10294585
- An Evaluation of a Hybrid STEM-Robotics Programme for Students with Special Needs in Guyana** 2022 - 2023
Co-Authors: P. DeFreitas, M. Zorec, J. Todd, O. Vanlewin
Conferences: World Literacy Summit 2023, HCI International 2023
DOI: 10.1007/978-3-031-35992-7_36

5. RESEARCH EXPERIENCE | PUBLICATIONS

University of Tartu, Estonia Nov 2023 - Present
Junior Research Fellow, Institute of Technology

University of Tartu, Estonia Feb 2022 - Jun 2022
Student Intern, iCV Research Lab

- Research on Gaze Estimation Methods.

6. TEACHING | MENTORING EXPERIENCE

University of Tartu, Estonia Sept 2023 - Present
Specialist in Robotics, Institute of Technology

- Creating lab manuals for LOTI.05.097 Computer-Aided Design (3 ECTS)
- Teaching Assistant for LTTL.00.004 Basics of Electronics (5 ECTS)
- Supervising BSc Students' Thesis
- SemuBot Project - Engineering Team

University of Guyana, Remote Sept 2023 - Present
Part-time Lecturer, Department of Computer Science

- Co-lecturer for CSE2101 - Software Engineering
- Lecturer-in-charge for CSE1200 - Introduction to Computing II
- In charge of creating lab materials for CSE4101 - Artificial Intelligence
- Supervise undergraduate students' final-year projects (CSE4100 & CSE4200)

Guyanese Girls Code, Online Jun 2021 - Aug 2022
Mentor | Trainer, Office of the Prime Minister Guyana

- Developed the first national-virtual GGC Summer Camp.
- Educated over 70+ Guyanese girls.
- Taught problem-solving and programming using Scratch.
- Facilitated the programme for two consecutive years.
- Expanded curriculum and integrated VEXCode VR.

University of Guyana, Turkeyen Campus
Academic Tutor | Lab Instructor, Department of Computer Science

- Information Management Concepts and Fundamentals - ITE1200 April 2021 - July 2021
- Computer Literacy - MNG2100 Sept 2018 - Dec 2018

STEM Robotics SEN Programme, Guyana Jan 2020 - Dec 2020
Coordinator | Trainer, Guyana Council of Organisations for Persons with Disabilities

- Led team in developing a novel STEM-Robotics curriculum.
- Implemented curriculum in 5 Special Educational Needs Schools.
- Worked with students with various disabilities in Guyana.

FIRST Global, Guyana Mar 2017 - Feb 2019
Team Mentor | Manager, Guyana National Robotics Team

- Co-founded the national team for the inaugural competition.
- Oversaw technical and administrative aspects of managing the team.
- Represented Guyana in Washington DC (2017) and Mexico City (2018).

STEM Outreach and Engagement, Guyana
Mentor | STEM Ambassador, STEMGuyana

July 2016 - Jan 2019

- Contributed to outreach programs promoting STEM education.
- Conducted interactive workshops, seminars, and training sessions (*including collaborations with: St Ann's Orphanage for Girls, Guyana Deaf Association, St. John Bosco Orphanage, etc).*
- Assisted in organising competitions, events and exhibitions (*including National Robot & Tech Exhibition 2017 & 2018, Berbice Tech Exhibition, etc).*
- Engaged in promoting hands-on learning and innovation in STEM.
- *Events Participated:* Youth Innovation Project of Guyana (YIPoG), DevX - Developers Exhibition, GTT Innov8 Summit, International Women's Day Expo, Annual Orphan and Vulnerable Children (OVC), among others.

7. PROFESSIONAL EXPERIENCE

SDTSystems, Slovenia
IoT Intern

Feb 2022 - Sept 2022

- Erasmus+ traineeship (Jun - Sept 2022)
- Researching and investigating development solutions
 - IoT Development: NB-IoT and LoraWAN.
- Solidworks modelling of electronic components.
- Proficient in report organising and concise presentations.
- Startup network ecosystem experience in Slovenia.

University of Guyana, Guyana
Assistant Web and Social Media Coordinator

Oct 2020 - Sept 2021

- Coordinated with Web Dev team for website development.
- Provided technical support for online presence.
- Resolved end-user support issues.
- Developed ICT policies for campus-wide usage.

University of Guyana Robotics Club, Guyana
Founder | Student President

Oct 2016 - Dec 2020

- Established a multidisciplinary makerspace.
- Organised workshops and public events (*including Roboduino 2019, RoboPi 2020, MLH Hack Day 2019, among others*)
- Mentored undergraduate students.
- Managed and coordinated STEM projects.
- Sought out, networked with and visited universities abroad (*including The Savannah College of Design (SCAD), Georgia Institute of Technology (Georgia Tech), Startup Incubators in Atlanta, New Jersey Institute of Technology (NJIT).*

8. PROFESSIONAL TRAINING

EIT Manufacturing Doctoral School,
EIT Label Certificate: Innovation & Entrepreneurship

Mar 2024 - Present

Winter School [Innovation & Business Design]
EIT Manufacturing, Estonia

Nov 2023 - Dec 2023

STRADA Women in Manufacturing
EIT Manufacturing, Online

Sept 2023 - Nov 2023

ENLIVE Virtual Exchange Project ENLIGHT University Network, Online	Feb 2023 - Apr 2023
Open Seventeen (O17) Challenge Citizen Science Centre Zurich, Online	Oct 2019 - Nov 2019
Global Entrepreneurship Exchange Program University of Massachusetts Lowell, USA	July 2019
Introductory Qualitative Research Method University of Florida University of Guyana	Jan 2019

9. PROFESSIONAL AFFILIATIONS

University of Guyana Robotics Club Advisor Mentor	2020 - Present
Tartu Hackerspace (Häkkerikoda) Member Workshop Co-organizer	Feb 2023 - Jun 2023
Caribbean Education Project (CaribEd) Guyanese Representative Coordinator	Mar 2020 - Dec 2020
University of Guyana Student Clubs <ul style="list-style-type: none"> • CompSci TechEd Rev Club, <i>Co-founder</i> <i>Vice President</i> • Girls in Computing Club, <i>Member</i> • UG Astronomical Society, <i>Member</i> 	2017 - 2019
Guyana Philatelic Society Member Stamp Collector Enthusiast	2017 - 2018

10. ACADEMIC CONFERENCES

International Conference of Innovative Technologies and Learning (ICITL2024) <i>Session Presenter</i> (Estonia)	Aug 2024
Cyber Innovation (Küberinnovatsioon) <i>IoT Workshop Volunteer</i> (Estonia)	June 2024
Physiology in Focus <i>Student Volunteer</i> (Estonia)	Sept 2023
HCI International (HCII2023) <i>Poster Presenter</i> <i>Student Volunteer</i> (Denmark)	July 2023
Cyber Innovation (Küberinnovatsioon) <i>3D Printing Workshop Volunteer</i> (Estonia)	June 2023
22nd Biennial Caribbean Academy of Science (CAS) <i>CAS Talk</i> <i>Panelist</i> , Youth in Science Forum (Online)	Aug 2021

University of Guyana Undergraduate Research Conference (URC) Apr 2019
Student Volunteer | Session Chairperson (Guyana)

CARINA/UWI Astronomy Conference May 2017
UG Representative | Attendee (Trinidad)

11. PRESENTATIONS | INVITED TALKS

Orientation for New and Continuing Students by Faculty of Natural Science,
University of Guyana Oct 2021
Presenter (Understanding the Value of Student Clubs)

Virtual Tech Fair by Girls in Tech & UniGuyana CompSci Dept Aug 2020
Cohost | Presenter

GEP Guyana Networking Event by the University of Guyana Sept 2019
Speaker | Co-organiser

Talk on Robotics, National Science Camp by the Ministry of Education, July 2018
Speaker (Robotics as a field of study & getting started in Guyana)

Ministry of Public Telecommunications, *Presenter | Panelist*

- **Launch of Guyanese Girl Code Program** Apr 2018
- **Girls in ICT Day Event** Apr 2018

Tech Talk 2017 by UG CS TechEd Rev Club Sept 2017
Co-organiser | Presenter (Robotics Kits)

Public Seminar on Astronomy and Astrophotography by UGAS (UG
Astronomical Society) & AAAG (Amateur Astronomer Association of Guyana)
Presenter Sept 2017

12. COMMUNITY SERVICE

University of Tartu Buddy Programme
Buddy | Helper, Aug 2022 - Jun 2023

Garage48 Hackathon
Materials Co-Mentor, Feb 2023

University of Tartu Nature Museum: Loodusfestivali / Nature Festival
Student Photographer, Estonia, Jun 2022

Dept of Computer Science: Open|Career Day Exhibition
Student Volunteer, University of Guyana, 2017 - 2019

Lusignan - Good Hope Learning Centre
Mentor | STEM-Robotics Teacher, Guyana, Feb 2017 - Dec 2019

Brickdam Youth Group
Lego Robotics Teacher, Guyana, Sept 2016 - Dec 2016

Science Fair Judge

- Georgetown International Academy, May 2018
- St. Rose's High School, Nov 2017

Host | Co-organiser | Volunteer

- *Hackerspace LinuxFest*, Mar 2023
- *Virtual Hour of Code Event*, UG Robotics Club, Dec 2020
- *Introduction to Robotics for Medical Imaging Students*, Feb 2020
- *Graphic Design Workshop*, University of Guyana, Mar 2019
- *CS50x Puzzle Day*, UG CS TechEd Rev Club, Apr 2017 & Mar 2019
- *Tech4Girls Google Home Workshop*, CANTO/GSMA, Jan 2019
- *CybersecurityED Exhibit - Cybersecurity Awareness Month*, UG Cybersecurity Club & CS TechED Rev Club, Oct 2018
- *Software Freedom Day 2018*, University of Guyana Free & Open Source Software (FOSS) Club, Sept 2018
- *National Hour of Code Outreaches* at 5 schools in Guyana, Dec 2016 - Jan 2017
- *Introductory Lego Robotics Workshop*, UG CS Dept, Oct 2016 - Nov 2016

13. TRAININGS, WORKSHOPS, OTHERS

UniTartu Student Project Contest , <i>Student Participant</i>	Jun 2023
EdTech Estonia Hackathon , <i>Participant</i>	Oct 2022
Demo4Green Approach Training , <i>Student Participant</i>	Jun 2022
3D Printing Workshop , <i>Online Participant</i>	Apr 2022
Pueblo Science Workshop , <i>Student Participant</i>	Aug 2017

14. LANGUAGES

English: Native Language

Creoles and pidgins, English-based: Native Language

TOEFL iBT® Score: **96**

Online Linguistic Support (OLS) English Test: **C2**

15. COMPUTER SKILLS

Programming: Python, Web Dev (HTML, CSS, JS)

Libraries: Pandas, Matplotlib, Seaborn, Numpy, OpenCV

Applications: Solidworks, Tinkercad, Github, Zotero, OpenGL, ROS, LabVIEW
PrusaSlicer, Cura, LaTeX, Google Workspace, WPS Office, Microsoft Suite, Trello

Platforms: Windows, Linux (Ubuntu, Raspbian | Raspberry Pi OS)

16. HONOURS AND AWARDS

Systems Pass It On Award By AnitaB.org Grace Hooper Celebration	July 2024
ICSR2023 Robot Design Online Competition, Special Mention for RSC [Robotic Study Companion] Project	Dec 2023
HCI2023 Student Design Competition, Bronze for RSC [Robotic Study Companion] Project	July 2023
30 Under 30 Caribbean Changemaker Honouree by Ignite Caribbean	June 2022
DeltaX Competition <ul style="list-style-type: none">• [Team BTS] Robot Basketball, 3rd place• [Team AWB] Pitch for New Start-up Ideas, 3rd place	Jan 2022
Women in ICT - Award of Excellence by Office of the Prime Minister Guyana	Nov 2021
The Council of the University Prize by The University of Guyana	2019/2020
Dean's List Faculty of Natural Science, University of Guyana	2018 - 2020
Guyana's National Youth Awards Innovation in Science & Technology by the Ministry of Culture, Youth and Sport, Guyana	Aug 2019
Outstanding Women in Technology Award by Girls+Technology Initiative	May 2019

17. FEATURES

FIRST Global Newsletter Recognition for the development of Guyana's first makerspace - University of Guyana Robotics Club	Aug 2019
Women in Engineering & Technology Awareness #GYGirlPower campaign by the European Union & the Ministry of Public Infrastructure, Guyana	2017 - 2019

More info via social profiles:

- [Goodwall](https://goodwall.io/farnaz-baksh) [goodwall.io/farnaz-baksh]
- [Linkedin](https://linkedin.com/in/farnaz-baksh) [linkedin.com/in/farnaz-baksh]
- [Facebook](https://facebook.com/farnazbaksh) [facebook.com/farnazbaksh]