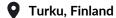# Uruj Sarwar

Cross-disciplinary experience in Biomedical Imaging, Medical Devices, Embedded Systems testing (Software & Hardware), & searching for Biotechnology industry-based opportunities

My Contact

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☎ +358 465338522

📍 Turku, Finland

in R^G

Education

- **Åbo Akademi University (ÅAU), Turku, Finland**
  M.Sc. in Biomedical Imaging (BIMA)
  August 2017 – July 2019

- **Sir Syed University of Engineering and Technology (SSUET), Karachi, Pakistan**
  B.S in Biomedical Engineering
  January 2011 – March 2015

Skills

- Cell Culture, DanioVision, Bone cutting Precision Saw, & Slide Scanner
- Language usage of Python, Assembly, Embedded C, & RISC-V Assembly
- Troubleshooting Analog/Digital Circuits, Embedded Systems debugging
- Zeiss ZEN, EthoVision, FFmpeg, ANYmaze, Proteus, & BioimageXD
- Audacity/OpenShot (audio/video editing)
- Microsoft Office, Windows, & Linux
- Mice brain sectioning (Cryostat) & dissections
- Familiarity with neurological conditions
- Remote work tools Zoom, Teams, Dropbox, Slack, & Thunderbird
- Technical, Creative, SEO, Copywriting, Research and Blogging Writing styles
- WordPress, Grammarly, familiarity with Scientific Publishing, JMP and SPSS

Research & Academic Projects

- **Master's Thesis** – Developing a High Throughput (HT) System for monitoring Zebrafish Behaviour
  May 2018 - June 2019

- **Bachelor's Final Year Project** - Therapeutic Aural Insertable Electrode to Stimulate Mandibular Nerve for Trigeminal Neuralgia
  January 2014 - January 2015

- **Semester Project** - Diaphragm Pacing
  March 2013 - March 2014

Professional Experience

PromoTek Oy - Promotional Sales Seller
September 2023 - Present
- Face-to-face seller to collect donations for NGOs and applying Digital Marketing tools

Aboa Space Research Oy (ASRO) – Microscopy Intern
May – October 2023: Mini Fluorescence Microscope (MFM)
- MFM Software/Hardware Testing (µManager) to improve limitations in the Product Development cycle
- Developing Systems Engineering-based client Requirements (Valispace)
- Market Analysis of current Microscopy-based technologies (Space & non-Space applications)

University of Turku (UTU)

Institute of Biomedicine – Project Researcher/Doctoral Researcher
August 2019 – Present
- Osteoclastic cell cultures with Bisphosphonate-drug types & doses (Bone, Biomaterial, & Zebrafish samples)
- Drug screening assays for the above-mentioned samples (Fluorescence & Scanning Electron Microscopy)
- Image data collection & analysis protocols (ImageJ) for above samples and Zebrafish Histological samples

Department of Computing – Project Researcher (FitOptiVis Project)
March 2020 - November 2021   (Partial Remote-work)
- Performed Software Testing (GitLab) & Bug Reporting of a Product design (System-on-Chip RISC-V)
- Product/Hardware testing on an in-house measurement system, with FPGA and JTAG tools

Turku Bioscience – Undergraduate Researcher (Neuronal Signalling Group – Master's Thesis) *May 2018 – June 2019*
- Developed a High Throughput (HT) Screening System by Microcontroller Interface & Camera (PiCam)
- System Testing with a White LED source (programmed light stimuli) to observe Zebrafish behaviour

Goethe University – Visiting Undergraduate Researcher (Background study for Master's Thesis) *November 2018*
- Behavioural testing & video tracking of mice towards acoustic stimuli and open-field experiments

Tecbz – Freelance Content Writer, Karachi, Pakistan
December 2016 - August 2017
- Creating customer software documentation, copywriting marketing and product/service description tasks

Prolynxs – Manager [Start-up Business], Karachi, Pakistan
April - December 2016
- Written communication documentation management tasks & SEO strategy in Blog writing for retail services
- Hiring/training employees for Marketing & Copywriting tasks, and engaging with clients

RealMacways – Senior Executive Content, Karachi, Pakistan
March 2015 - March 2016
- Technical writing involved business proposals, Quantitative Market analysis & Internal Marketing
- Created, edited, & proofread marketing content & copywriting tasks for web designing & retail services

Internships and Training – Hospitals and University-based experience
2012 - 2014
- Hospitals: preventive maintenance, medical equipment inventory management & paperwork compilation
- University: familiarity with Raspbian and Biomimetics in a Line Follower Robot project using Python

Extra-Curricular Activities and Achievements

October 2023:	Winning Team for Revvity HealthTech Hackathon by Boost Turku
August, 2019 – Present:	Sports Tutor for CampusSport in Turku
August, 2022 – Present:	Ilo Kuoro participant at the Turun Suomenkielinen Työväenopisto
January, 2019 – Present:	Choir member for Florakören
July 2022:	Volunteer work in IT and Technology part of the convention, Ropecon
2017 – 2019:	Full tuition fee scholarship from ÅAU
May, 2018 – May, 2019:	Academic Tutor for international master's degree program (BIMA at ÅAU)
2013 – 2014:	Tuition fee scholarships from SSUET