

Aravinth Panch

An interdisciplinary expert with 17+ years of global experience in science, engineering, arts and sustainability, with the core expertise in research, development and production of electro-mechanical embedded systems and digital products.

- EdTech, AgriTech, HealthTech, BioTech, NanoTech, GreenTech, BlueTech -

1 Personal

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DATE: 26th August 2020

2 Experience

2.1 Work

APR 2020	Co-Founder Chief Technology Officer
JUN 2019	<i>Watergenics UG, Berlin, Germany</i>
JUN 2019	Head Of Embedded Systems Engineering
AUG 2017	<i>Next Big Thing AG, Berlin, Germany</i>
JUL 2017	Lead Embedded Systems Engineer
APR 2016	<i>Senic GmbH, Berlin, Germany</i>
MAR 2016	Co-Founder Chief Technology Officer
OCT 2015	<i>Macexperts, Bangalore, India</i>
SEP 2015	Embedded Systems Engineer
AUG 2015	<i>SmartB Energy Management GmbH, Berlin, Germany</i>
MAY 2015	Systems Architect
OCT 2014	<i>The Jodel Venture GmbH, Berlin, Germany</i>
SEP 2014	Embedded Systems Engineer
JAN 2013	<i>Yetu AG, Berlin, Germany</i>
JUL 2011	Senior Systems Engineer
APR 2011	<i>Infosys LTD, Mysore, India</i>
MAR 2011	Co-Founder Chief Technology Officer
NOV 2009	<i>Academia Grandiosa Medicinae, New Delhi, India</i>

OCT 2009	Systems Engineer
OCT 2008	Tata Consultancy Services, New Delhi, India
Current	Founder Interdisciplinary Expert Consultant
MAY 2003	araCreate UG, Global

2.2 Skills

2.2.1 Technical

HARDWARE	Design of Schematics, Footprints and Digital & Analog Circuits
EMBEDDED	Development of Baremetal Firmware, IoT & Embedded Linux
ROBOTICS	Development of AI, ML, Computer Vision & Motion Control Systems
MECHANICS	Design of Manufacturable Electro-Mechanical Systems
FABRICATION	Additive & Subtractive Manufacturing of Wood, Plastic & Metal
MANUFACTURING	Design for Manufacturing, Assembly, Certification & Cost
SOFTWARE	Development of Desktop, Web, Mobile & Cloud Applications
DEVOPS	Deployment of Build, Test, Monitoring & Runtime Infrastructure
MULTIMEDIA	Design of Graphics & Audio-Visual-Haptic Art Installations
DEEP TECH	Sensor Design, BioTech, Bioinformatics & NanoTech (Graphene)

2.2.2 Soft

ENTREPRENEURSHIP	Business & Financial Modeling, Investment, Recruitment
	Performance Marketing, Networking & Company Culture
LEADERSHIP	Design Thinking, Product Development Lifecycle, Agile Project
	& Team Management (SCRUM & KANBAN), Team Building,
	Goal-setting, Coaching (NLP) & Expectation Management
SOCIAL	Community Building, Mentoring, Empowerment & Sustainability

3 Education

3.1 Academics

2015	Master of Science in Electrical Engineering
2011	Technical University of Berlin, Berlin, Germany
2008	Bachelor of Technology in Electronics and Communication Engineering
2004	SRM University, Chennai, India
2004	Associate's Degree in Multimedia
2003	ARENA Multimedia, Chennai, India

3.2 Research

2015	Humanoid Robotics
2014	DAI LABOR - Distributed Artificial Intelligence Laboratory, Berlin, Germany

2014	Biometrics and Deep Security <i>T-LABS - Deutsche Telekom Innovation Laboratories, Berlin, Germany</i>
2014	Autonomous Vehicle
2013	<i>DCAITI - Daimler Center For Automotive Information Technology Innovations, Berlin, Germany</i>
2013	Wireless Mesh Technologies <i>TKN - Telecommunication Networks Group, Berlin, Germany</i>

3.3 Certifications

2012	TestDAF - Test of German as Foreign Language. <i>Score: 16/20</i>
2010	IELTS - International English Language Testing System. <i>Score: 7.5/9</i>
2010	EC-Council - Ethical Hacking
2009	CCNA - Cisco Certified Networking Administration

4 Nice to have

4.1 Languages

TAMIL	Native proficiency
ENGLISH	Bilingual proficiency
GERMAN	Professional proficiency
HINDI & URDU & MALAYALAM	Limited working proficiency
RUSSIAN	Elementary proficiency

4.2 Awards

2020	Global Community Bio Fellowship 2020, MIT
2019	The Winner of Falling Walls Science Engage 2019
2011	Erasmus Mundus Scholarship Of 48,000€

4.3 Consulting | Advisory | Mentoring | Community Building Experience

AUG 2018 - CURRENT	Co-Founder Director Of Innovation, <i>DreamSpace Academy, Batticaloa, Sri Lanka</i>
AUG 2015 - CURRENT	Co-Founder Partnerships, <i>Zerosec Solutions, Coimbatore, India</i>
FEB 2014 - CURRENT	Founding Member Partnerships, <i>Greenbuzz Berlin e.V., Berlin, Germany</i>
APR 2019 - CURRENT	Ambassador Tech Diplomacy, <i>AsiaBerlin By Berlin Senate, Berlin & Asia-Pacific</i>
APR 2020 - CURRENT	Partner Engineering & Manufacturing, <i>BatchOne GmbH, München, Germany</i>
MAY 2018 - CURRENT	Advisory International Partnerships, <i>MotionLab ML GmbH, Berlin, Germany</i>
JUN 2020 - CURRENT	Advisory Biotech & Nanotech, <i>Sri Lanka Institute Of Nanotechnology, Sri Lanka</i>
JUN 2020 - CURRENT	Advisory Nanotech, <i>Advanced Material Pandemic Taskforce, USA</i>
NOV 2019 - CURRENT	Advisory Engineering & Manufacturing, <i>Motorskins, Berlin, Germany</i>
SEP 2018 - JUN 2019	Advisory Investment & Manufacturing, <i>Assistr DHS GmbH, Berlin, Germany</i>
SEP 2017 - JUN 2019	Advisory Engineering & Manufacturing, <i>Metr BMS GmbH, Berlin, Germany</i>
DEC 2018 - JUN 2019	Advisory Corporate Partnerships, <i>Carion Mobility GmbH, Berlin, Germany</i>

MAR 2020 - CURRENT	Trainer Access 2 Perspectives (A2P), <i>Global South</i>
APR 2020 - CURRENT	Mentor Global South Coordinator, <i>Global Talent Mentoring, Regensburg, Germany</i>
SEP 2018 - CURRENT	Mentor Innovation Network For Advanced Materials (INAM), <i>Berlin, Germany</i>
APR 2020 - CURRENT	Mentor The Startup Club, <i>Milan, Italy</i>
FEB 2020 - CURRENT	Mentor Imagine2030 Mobility Accelerator, <i>Berlin, Germany</i>
MAR 2020 - CURRENT	Mentor Vision Health Pioneers (VHP), <i>Berlin, Germany</i>
JAN 2020 - CURRENT	Mentor Berlin Startup School, <i>Berlin, Germany</i>
OCT 2019 - CURRENT	Mentor Founder Institute (FI), <i>Berlin, Germany</i>
MAR 2019 - CURRENT	Mentor Canary Islands Hub, <i>Gran Canaria, Spain</i>
APR 2019 - CURRENT	Mentor Decelera, <i>Menorca, Spain</i>
NOV 2019 - CURRENT	Mentor WLounge, <i>Berlin, Germany</i>
SEP 2016 - DEC 2016	Mentor Singa Deutschland - Refugee Integration, <i>Berlin, Germany</i>
MAY 2019 - CURRENT	Community Maker Event Organizer, <i>Global Innovation Gathering (GIG)</i>
MAR 2020 - CURRENT	Community Scientist Event Organizer, <i>Just One Giant Lab (JOGL)</i>
OCT 2014 - CURRENT	Community Scientist Event Organizer, <i>Science HackDay Berlin (SHDB)</i>
MAY 2015 - CURRENT	Community Maker, <i>Maker Faire Berlin</i>
SEP 2015 - SEP 2019	Community Artist Event Organizer, <i>Spektrum Berlin</i>
OCT 2014 - AUG 2015	Community Scientist, <i>DAINAMITE - Humanoid Robot Robocup SPL Team</i>
MAR 2019 - CURRENT	Event Organizer, <i>AsiaBerlin Summit (ABS)</i>
MAR 2020 - APR 2020	Event Organizer, <i>Datanatives Hack Corona</i>

4.4 Products | Projects

2020	Corona Detective SARS-CoV-2 Rapid Test Kit, https://projects.aravinth.info/covid
2020	CoronaBot ChatBot in Tamil, https://corona.dreamspace.academy
2020	Impedance Spectroscopy For Nitrate Measurement, https://watergenics.tech
2019	araBeat Electrocardiogram (ECG) Sonification, https://projects.aravinth.info/arabeat
2019	araMetrics Impact Measurement System, https://projects.aravinth.info/arametrics
2019	M-Gate M-Bus Sub-Metering Gateway, https://metr.systems
2019	araCloud Cloud Deployment DevOps, https://projects.aravinth.info/aracloud
2018	mgateOS Embedded Linux, https://projects.aravinth.info/mgateos
2017	Senic Hub Smart Home Gateway, https://senic.com
2017	senicOS Embedded Linux, https://github.com/getsenic
2016	Nuimo Smart Controller, https://senic.com/nuimo-control
2016	araBot Digital Fabrication Machine, https://projects.aravinth.info/arabot
2016	Senic WiFi & BLE Link Quality Benchmarking, https://projects.aravinth.info/wifi
2015	SmartB Non-Intrusive Load Monitoring Gateway, https://smartb.de
2015	Swan Lake Music Buzzer, https://projects.aravinth.info/swan
2015	VIVID Heart Of The City, https://projects.aravinth.info/heart
2015	Macsxperits Hydroponics Fertigation System, https://projects.aravinth.info/macsxperits
2015	Home DNS OpenHAB Home Automation, https://projects.aravinth.info/dns
2014	Jodel Geofenced Anonymous Messaging Platform, https://jodel.com
2014	Gesture Recognition For Human Robot Interaction, https://projects.aravinth.info/hri
2014	Confusion Touch Sensitive System, https://projects.aravinth.info/confusion
2014	TKN Smart Green House, https://projects.aravinth.info/green
2014	Yetu Telepresence Robot, https://projects.aravinth.info/cam
2014	Spectrum Spectral Acoustic Emitter, https://projects.aravinth.info/spectral
2013	StreeMuFi Street Musicians Platform, https://projects.aravinth.info/streemuFi
2013	TKN RSSI Based Indoor localization, https://projects.aravinth.info/rssi
2013	Yetu Smart Home Gateway, https://github.com/yetu
2013	DNA Recognition For Biometric Identification, https://projects.aravinth.info/biometric
2007	Steganography Message Concealment, https://projects.aravinth.info/steg

2020	araCreate Company Website, https://araCreate.com
2019	Watergenics Company Website, https://watergenics.tech
2019	HSB Company Website, https://hardwarestartups.berlin
2018	DreamSpace Company Website, https://dreamspace.academy
2015	Macsexperts Company Website, http://macsexperts.com
2011	KIMS Company Website, http://kims-study.com
2009	AGM Company Website, http://studyatagm.in
2008	Aravinth Personal Website, https://aravinth.info
2020	Dentaria Dental Health Management Tool
2013	Autonomous Vehicle Cooperative Adaptive Cruise Control for Daimler Mercedes
2013	Shanti CRM Marketing Campaign Management Tool
2011	Petroleum Vessels & Tanks Management System For British Petroleum
2011	Aircraft Maintenance Records System For Boeing Corporation
2010	Academics LMU E-Learning Management System For Liaoning Medical University
2009	GSM DTMF Controlled Two Axes Robot For Fire And Metal Detection
2009	Telecom Call Data Records System For BSNL
2007	Purvottar Consultants Company Branding
2006	BrokerForParts Electronic Parts Supply Chain Management Tool
2003	Interactive Anatomy Learning Tool For Moscow Medical Academy

4.5 Talks, Workshops & Exhibitions

2020	Keynote Women in STEM - Diversity & Inclusion, <i>iGEM, Global</i>
2020	Talk Open Science Responses To COVID-19, <i>Enpact, Germany</i>
2020	Talk Innovation Ecosystems Around The World, <i>Technical College Batticaloa, Sri Lanka</i>
2020	Talk Innovation Ecosystems Around The World, <i>Dreamspace Academy, Sri Lanka</i>
2020	Talk Innovation Thinking, <i>ESOFT, Batticaloa, Sri Lanka</i>
2020	Workshop Emerging Startup Ecosystem Of Uzbekistan, <i>PDL, Enpact, Germany</i>
2019	Talk Global Innovation Gathering, <i>Chaos Communication Congress, 36C3, Germany</i>
2019	Workshop Sustainable Making, <i>Gig Dots 2019, Global Innovation Gathering, Kenya</i>
2019	Talk Data, Sovereignty, Democracy, <i>United Nations, IGF 2019, Germany</i>
2019	Keynote Co-Creating The Dreams With PBL, <i>Relogia 2019, Bulgaria</i>
2019	Workshop Company Culture For Social Responsibility, <i>WLounge, Germany</i>
2019	Talk Breaking The Wall Of Subject Based Learning, <i>Falling Walls 2019, Germany</i>
2019	Talk Hardware: Starting Up The Hard Way, <i>Founder Institute Berlin, Germany</i>
2019	Talk Advanced Prototyping, <i>Openhpi, School Of Design Thinking, Germany</i>
2019	Talk The Fuck Ups To The Good Times, <i>The Good Times 2.0, Indonesia</i>
2019	Talk Motionlab Berlin - The Innovation Hub, <i>The Good Times 2.0, Indonesia</i>
2019	Panel 6Th Green And Innovative Economy, <i>Startup Nation Thailand 2019, Thailand</i>
2019	Exhibit araBeat + araBot, <i>Maker Faire Berlin 2019, Germany</i>
2019	Keynote Connecting Asian Origin, <i>Asia Pacific Week Berlin 2019, Germany</i>
2019	Talk Advanced Material Startups Ecosystem, <i>Asia Pacific Week Berlin 2019, Germany</i>
2019	Talk Introduction To Community Innovations, <i>Dreamspace Academy, Sri Lanka</i>
2019	Talk Motionlab - The Innovation Hub, <i>Canary Islands Hub, Gran Canaria</i>
2019	Exhibit arabeat : Electrocardiogram Sonification, <i>Ackerberg MoZaic East, USA</i>
2019	Talk Introduction To Berlin Hardware Ecosystem, <i>Shenzhen Meets Berlin, Germany</i>
2018	Keynote Motionlab - The Innovation Hub, <i>Innovation Summit 2018, China</i>
2018	Talk Robotics & IoT Innovations, <i>Broadband World Forum 2018, Germany</i>
2018	Exhibit arabeat : Electrocardiogram Sonification, <i>GOSH 2018, China</i>
2018	Talk Over-The-Air Update : IoT, <i>Ethereum Camp 2018, Germany</i>
2017	Talk Learn Bluetooth Low Energy With Nuimo, <i>Techjam 2017, Germany</i>
2015	Exhibit Hydroponics Kitchen Vertical Farm, <i>Krishi Mela 2015, India</i>

2015	Exhibit Human ♥ Robot, <i>Spektrum, Germany</i>
2015	Exhibit Gesture Recognition For Human-Robot Interaction, <i>DAI Labor, Germany</i>
2015	Exhibit Heart Of The City, <i>Vivid Light Festival 2015, Australia</i>

Summary

Aravinth is an interdisciplinary expert with 17+ years of global experience in science, engineering, arts and sustainability, with the core expertise in research, development and production of electro-mechanical embedded systems and digital products.

As an engineer, he worked for 2 big corporates in the telecom sector and worked for 8 tech startups in the sector of education, smart home, media, agriculture, energy, healthcare & water, in Asia & Europe, where one of the hardware products was sold in 30K+ quantities and one of the software products reached 10M+ users.

As an entrepreneur, he co-founded 7 organisations in the sector of education, sustainability, agriculture, consulting & engineering services, in Asia & Europe.

As a scientist, he researched at 4 academic research institutions in the field of wireless technologies, autonomous vehicles, biometrics, humanoid robotics & machine learning, in Germany.

As an educator, he trained several young innovators and mentored 120+ deep tech startups in the domain of advanced materials, healthcare, agriculture, aerospace, energy, automotive & biotechnology, globally.

As an advisor, he is affiliated with 23 organisations and supported several individuals, startups, accelerators, incubators, innovation hubs, corporates, investors, manufacturers, research institutions, universities, government initiatives, art galleries and social enterprises, in more than 50 countries.

As an artist, he has co-created several new media art installations for temporary and permanent exhibitions, which attracted more than 1.5 million visitors, in Germany, Australia & USA.

As a community builder, he co-created and has been curating several communities for startups, sustainability, education & art, in Asia, Europe & Africa.