Abdulrahman Alsanad, MAS

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| 777 University Drive, Tempe, AZ asanad@asu.edu |  |  |

# Education

**M.A.S.** Arizona State University, Geographic Information Systems Aug 2021

 Capstone: “Potential Illegal Cannabis Growth Operation Sites”

**B.S.** Arizona State University, Geographic Information Sciences Dec 2019

 Graduated Cum Laude

# Experience

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| **Laboratory for Energy and Power Solutions**, Arizona State University **GIS Data Analyst*** Managed geospatial databases and delivered organized and clean data for the team.
* Collected, checked quality, and prepared data for spatial analysis of remote communities in the pacific islands and Sub Saharan Africa for the purpose of electrifying and energy access.
* Visualized temperature data predictions for the US to show the impact of heat on mobile home owners.

**Knowledge Exchange for Resilience**, Arizona State University | Dec 2022 - PresentSept 2021 - Present |

**GIS Analyst**

* Created models using ArcGIS Model builder to automate the process of mapping a mini power grid for projects in Sub Saharan Africa.
* Duplicated the models on QGIS to support the opensource resources.
* Visualized Electricity consumption data for the years 2019, and 2020 to study the effects of Covid-19 in the Phoenix Metro area for Vice Provost Elizabeth Wentz.
* Digitized 50+ slums in Kampala, Uganda for the purpose of an electricity access project.
* Developed a methodology to create a Tree Canopy Cover Percentage layer for the Census Bureau.

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| **YouthMappers** | Jan 2019 - Present |

**Mentor, President, Vice president**

* Co-founded YouthMappers chapter at ASU.
* Organized and held multiple mapathons to map heat vulnerability areas in Arizona, specifically trailers and mobile homes.
* Organized and held a mapathon to map unelectrified towns and villages in Sub Saharan Africa.
* Recruited 50+ members and mentored 15 members.

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| **Knowledge Exchange for Resilience**, Arizona State University | May 2019 - Aug 2021 |

**GIS Technician**

* Created directionality maps for service provider companies in the Phoenix area.
* Generated Emissions maps for the years 2016, 2017, and 2018 to aid in the research for Vice Provost Elizabeth Wentz.
* Contributed to the research of Heat indoor deaths by mapping the affected areas using OpenStreetMaps.
* Added to and updated partnership database through Collaboratory software at ASU.

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| **Empowered Youth Leaders,** Maricopa County Public Health, Phoenix, AZ  | July 2019 |
|  **Guest Lecture** |  |

* Gave a training session for summer school students and explained the benefits of using story maps to represent and visualize their survey data and tell the story behind it.

# Interviews, publications and Media

* **Charley, E., Varfalameyeva, K., Alsanad, A., Solís, P. (2023). Mapping for Resilience: Extreme Heat Deaths and Mobile Homes in Arizona. In: Solís, P., Zeballos, M. (eds) Open Mapping towards Sustainable Development Goals. Sustainable Development Goals Series. Springer, Cham.** <https://doi.org/10.1007/978-3-031-05182-1_21>
* **Stats, A.\*, A. Alsanad\*, K. Conrow, E. Makings, K. Sweat, A. Frazier, M. Leung. Environmental Suitability Analysis for Cannabis and Hemp Growth in Arizona. Society of Environmental Toxicology and Chemistry (SETAC) North American Annual Meeting. November 14018, 2021. (Poster)**
* **“Knowledge Exchange for Resilience gives ASU students valuable experience,” ASU News, May 24, 2021** <https://news.asu.edu/20210524-sun-devil-life-asu-student-workers-knowledge-enterprise>
* **“New ASU fellowship program addresses urban equity through geographic perspectives,” ASU News, October 2, 2019** <https://news.asu.edu/20191002-new-asu-fellowship-program-addresses-urban-equity-through-geographic-perspectives>

# Skills and Certificates

**GIS Software**: ArcGIS Pro, ArcMap, QGIS, Maxent, Python, SQL Server Management Studio.

**ESRI Academy Certificates**: Building Geoprocessing Models Using ArcGIS Pro, Creating and Editing Metadata in ArcGIS, Data QC with ArcGIS: Automating Validation, Introduction to Regression Analysis Using ArcGIS Pro, Map Design Fundamentals, Python Scripting for Geoprocessing Workflows, Working with Geodatabase Domains and Subtypes in ArcGIS.

**Languages:** Arabic (Native speaker), English (Fluent)