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**Naa Dedei TAGOE**

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**Home Country**  
Ghana

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**Degree**  
PhD in Geomatics

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**Expertise**  
Digital Photogrammetry  
and Geoinformatics

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**Research Focus**  
3D Reconstruction  
of Heritage Sites

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**Host University**  
University of Cape Town,  
South Africa

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**Fellowship Awarded**  
2012

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Naa Dedei Tagoe was born and raised in Accra, Ghana, with her elder brother, who is a structural engineer. Her mother, a teacher, taught her mathematics and science at school and encouraged her academic pursuits. Her father, a quantity surveyor, inspired her to pursue a career in science. She is married to a lecturer and has two daughters.

Naa Dedei enrolled at the Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, and graduated in 2006 with a BSc degree in Geodetic Engineering. She then spent one academic year working at the University as a teaching assistant. In 2007, she received a scholarship from the German Catholic Academic Exchange Service (KAAD) to study for an MSc degree in Stuttgart preceded by a four month German language course in Bonn, Germany. Naa Dedei graduated from Stuttgart University of Applied Sciences in 2009 with an MSc degree in Photogrammetry and Geoinformatics. Her thesis was entitled “The Fichtner Project Portal” and described the development of a web portal based on Google Maps.

The PhD studies reflect Naa Dedei’s belief that Africa needs to increase awareness of its traditions and cultural heritage, and preserve them for the future. Employing spherical photogrammetry, she intends to develop a new mathematical model and software concepts for extracting detailed and accurate spatial information of heritage sites—i.e. 3D models of buildings and other structures—from spherical panoramas. This will be achieved through incorporating methods for the automated association of images, extraction of points by image matching algorithms, and well-known surface modeling algorithms.

Naa Dedei was already lecturing at the University of Mines and Technology in Ghana before commencing her PhD program, and she hopes to improve on her teaching and research skills after its completion.