

# Preparing to meet new challenges

**Bereket Demeke is an honours student in Computer Engineering. Formerly from Ethiopia, he immigrated to South Africa with his parents in 2008. He has excelled academically and is set to reach great heights as a computer engineer.**

After matriculating from the Sol Plaatjie Secondary School in Mafikeng, North West, Demeke enrolled for a bachelor's degree in Electrical, Electronic and Computer Engineering at the University of Pretoria.

According to Prof Sunil Maharaj, who supervised his final-year design project, Demeke is an intelligent, disciplined and diligent scholar. "This has led to him being a top performing student," says Prof Maharaj. "He works hard and applies his mind to the challenge that he needs to address. He works well in a team, yet also excels when required to work independently."

Demeke's excellent performance in Mathematics, Physics and Computer Science in matric was rewarded with a bursary from the SENTECH Chair in Broadband Wireless Multimedia Communications (BWMC). This paved the way for a successful academic career. His hard work resulted in him obtaining his degree with distinction, and also receiving the Wilhelm Leuschner silver medal and prize for outstanding performance in the third and fourth year of study in computer engineering.

Demeke's choice of the University of Pretoria for his undergraduate studies was based on the excellent reputation of the University's School of Engineering, as well as the Department of Electrical, Electronic and Computer Engineering. He has been a residence student since his first year of study, and was able to take part in every aspect of student life.

During the course of his studies, Demeke put his excellence in Mathematics to good use by participating in the Dr Maths on MXit programme. This is an initiative of the Council for Scientific and Industrial Research (CSIR), and has been

incorporated into the University of Pretoria's community engagement programme.

The highlight of his undergraduate studies was undoubtedly his final-year design project. This provided him with the opportunity of applying the theory he had learnt to a real-life situation. His project entailed developing a system of counting the number of passengers travelling in a particular taxi in a single day. It made use of video technology, as well as face recognition and tracking software. This would enable taxi drivers to monitor their earnings by keeping record of the number of passengers they transported daily.

Demeke is completing his honours degree in the SENTECH Chair in BWMC at the University of Pretoria, where he will have the opportunity to undertake research in the dynamic and innovative field of telecommunications. ➔



➔ *Bereket Demeke.*