Rotebühlplatz 41/1

A Journey through the Matrix
– Applied Computer Science at DHBW Stuttgart

You think computer science is all about nerds sitting in basements all night long, transforming coffee into lines of source code? Pale geeks wearing the same shirt for weeks with horn-rims and greasy hair? No way. Neo, the Matrix protagonist, taught us to think differently about programmers. Computer scientist can be heroes, Nobel prize laureates, or rock stars. They work in such amazing fields as artificial intelligence, build super-computers that are a million times faster than the one you mess around with every day, and code apps and smart phones so cool you hear the ice cracking.

How the heck do you come to be the role model of a computer scientist? Why, it is pretty easy: HP recruits a good number of bright students for the Applied Computer Science program at DHBW Stuttgart every year. Located in the very downtown of Stuttgart, the center of the high-tech metropolitan region with a population of over five million, computer science students enjoy a comprehensive university-level Bachelor curriculum that spans from math to project management, from software engineering to scientific working techniques, from formal logic to language and intercultural competence.

Instructed by a well-balanced mix of professors and highly acclaimed industrial lecturers, from the very first day, you experience hands-on computer science in all its facets. You will learn that it is not enough to know the intrinsic components, functions, tools and languages of computers by heart, but that there are multiple other skills you will need in order to speed up your career and get to where Neo got. Classes on learning techniques will get you prepared for the tough exams every student has to pass. You will learn how to present your ideas, objectives, inventions, or achievements to an audience to capture its attention,

respect and approval. To be well-prepared for the challenging work in international teams and projects, you will attend complementary lectures on project management, marketing, and business administration.

Speaking of internationalization: More than a decade ago, at DHBW Stuttgart, we recognized the importance of preparing students for the challenges and complexity of the international business in major companies. Together with HP and IBM, we established a branch of the Applied Computer Science program primarily taught in the English language. Having spent many years in industry and academia in the United States (New York, Los Angeles, Berkeley), I took over the role of the department head of the international computer science program in July 2011. Together with a team consisting of professors and industrial practitioners from the U.S., England, Turkey, and Germany, we produced an outstanding record of high-performing graduates whose skill set allows them to excel in such diverse areas as software development, professional services, quality assurance, security, project and program management, marketing, sales, customer support, technical consulting, hardware administration, R&D, and so on.

The international practice gets even more intensified by our offer of spending a theory semester abroad at one of our partner universities. E.g., in the past years, our students have been enrolled at Staffordshire University, Royal Melbourne Institute of Technology, German University in Cairo, or the California State University, East Bay. Financially supported by HP, a study term in a foreign country is a life time experience none of the students ever regretted. This is especially so as credits earned at our partner universities are accepted by the DHBW Stuttgart, hence, the overall du-

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ration of your studies (three years) does not get affected.

A crucial prerequisite to earn the degree of a Bachelor of Science is, guess what?, a good amount of dedication to science and research. Throughout the theory phases, you will gain substantial knowledge about how to scientifically deal with a topic at hand. You will learn how to explore the state of the art of some field or technology by way of literature review, how to collect proper bodies of data and facts to back up your claims and believes, how to run intensive experiments on cloud infrastructure, how to mine, interpret, and understand results, how to tell the significant from the insignificant, the relevant from the irrelevant, and how to express yourself clearly in persuasive written and spoken language. For this sake, the computer science department at DHBW Stuttgart features multiple research centers spanning from emotional computing to app development to spoken dialog systems. Here, you will be able to get creative, tackle real-world scientific questions in the scope of your study work, write your first peer-reviewed paper for an international conference, and get elevated to a specialist in the field - a hero of computer science!

I truly hope to get you on board of the Nebuchadnezzar, i.e., the Applied Computer Science program at the DHBW Stuttgart!