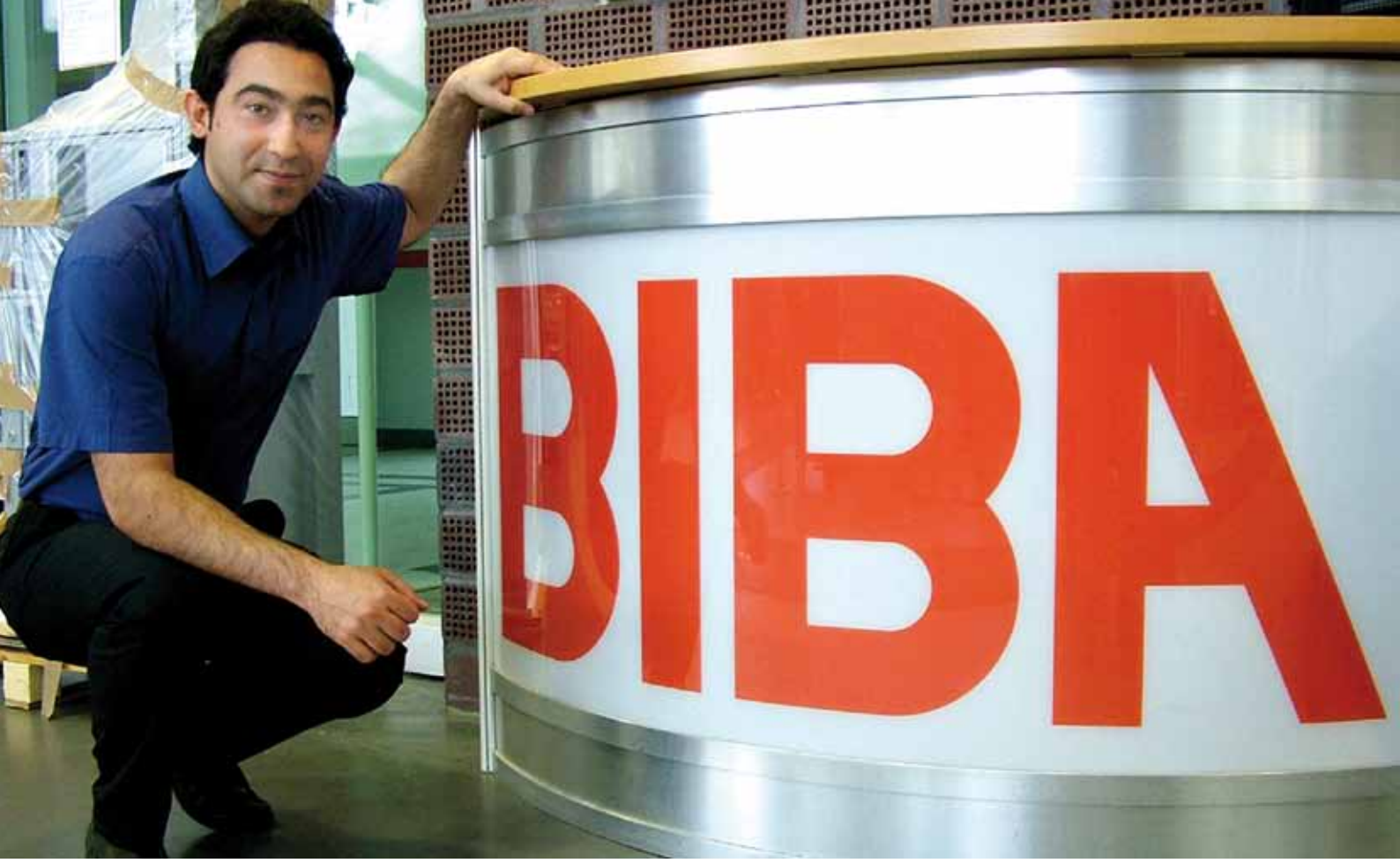

Afshin Mehrsai im BIBA, dem Bremer Institut für Produktion und Logistik an der Universität Bremen – einem seiner Arbeitsplätze im Rahmen seines Aufenthaltes an der Internationalen Graduiertenschule für Dynamik in der Logistik.
Afshin Mehrsai in BIBA, an engineering research institute dealing with the issues of production and logistics systems at the University of Bremen – just one of the workstations during his stay at the Graduate School for Dynamics in Logistics.

Engineer's Career in a World which Has Become a Village

His father knew it long ago: "You will grow up to be an engineer or a pilot". For already as a small boy, Afshin Mehrsai was fascinated by everything to do with technology – and his father, a Professor of Medicine at the University of Tehran, did his best to foster this fascination. And today he really is an engineer. Currently he is researching at the University of Bremen, working on his doctoral dissertation at the International Graduate School for Dynamics in Logistics. Spurred on by his passion for technology after leaving school he enrolled as an undergraduate student of Industrial Engineering at University in Tehran. Then the young Iranian ventured farther afield – because, as he believes, via modern communication technology and ease of travel, the world has meanwhile become a village. "Nowadays you have to gather experience in different countries if you want to build a career", says the 29-year-old. "Especially in the field of engineering it is essential to have international contacts".

Consequently, immediately after taking his Bachelor exams he went about finding a way to advance his studies abroad. He was attracted to Canada and the USA but eventually his choice fell on Germany. He had been here once during his childhood in 1990, when his father spent three months as a visiting professor at the Hanover Medical School, taking little Afshin and his sister with him. "That was pretty difficult. Although we couldn't speak any German we had to attend a regular German school. After three months, though, we could get by quite well".

Masters Studies in Berlin

His next visit to Germany took him first of all to Berlin, where he wrote his Masters thesis in the field of "Global Production Engineering" at the Technical University there. On this program he was in company with many fellow international students of like minds, aspiring engineers from several different countries. Some of the lecturers came from all over the world. It was not even absolutely necessary to speak German: "The courses were delivered in English, and everyday German was not so much a problem". He pursued his Masters with vigour: "I always like to get things done as early as possible. I actually finished the two-year Masters Program in just twelve months. This made it possible for me to extend the mandatory internship from two to nine months".

He spent about two months gaining work experience at the Fraunhofer Institute in Berlin, another seven months in Hanover at Contitech AG, a subsidiary of the tyre manufacturer Continental. After having only learnt basic German in Teheran before coming to Germany, he then got down to learning German seriously. His command of German was boosted enormously during the internship months and then in Bremen, where the University offers its international students excellent conditions to improve their German-language skills.

International Graduate School as Ideal Continuation

He decided to continue his academic career at the University of Bremen because of the excellent offer here – it fitted perfectly in his career plans. He had researched many different doctoral programs on the Internet. Beside the multitude of offers at universities in other countries he came across the International Graduate School for Dynamics in Logistics, which was set up a few years ago by the Bremen Research Cluster for Dynamics in Logistics (LogDynamics). Part of the mission pursued by this structured doctoral program is to make doctoral studies in engineering more international – and they accomplish this via an offer of interdisciplinary research topics that is probably unique in the field of logistics. LogDynamics has taken several themes and bundled them together in an innovative program", Afshin Mehrsai explains. His application was successful. He was also fortunate to be awarded a three-year scholarship from the Bremen Kieserling Foundation, which funds the scientific community and research focused on the transport economy and logistics.

Afshin Mehrsai's doctoral thesis deals with the feasibility of autonomous logistics processes, which is also the main focus in the LogDynamics research cluster. The concept behind this is to optimize and facilitate logistics processes. Experts believe it will eventually be possible that objects within logistics processes will be capable of autonomously reaching decisions about the best course to take – without any external interference whatsoever. "Whether this can be achieved in conventional logistics operations is quite another question – and that is what I am investigating", says Mehrsai. His primary research method is simulation, in which "learning palettes" play an important role.

At the end of 2011 when he has completed his doctorate, Afshin Mehrsai, who is also a keen sportsman, will probably leave Bremen again – even though he has come to appreciate its charm vis-à-vis large cities like Teheran or Berlin. Thanks to his excellent academic education, he will be able to find many opportunities on his journeys through the "global village". "I still haven't quite made up my mind whether I will remain in academia or move to industry". Wherever his career as an engineer may take him – his stay in Bremen will always occupy an important place in his memories and he will continue his cooperation with LogDynamics.

Selbststeuernde Prozesse in der Logistik sind sein Forschungsthema: Afshin Mehrsai arbeitet unter anderem mit „lernenden Paletten".
His research revolves around autonomous logistics processes: Among other things, Afshin Mehrsai is working with "learning pallets".

Ingenieurskarriere im Weltdorf

Sein Vater war schon früh überzeugt: „Du wirst Ingenieur oder Pilot". Denn bereits von Kindesbeinen an interessierte sich Afshin Mehrsai für alles, was mit Technik zu tun hatte. Heute ist der Iraner tatsächlich Ingenieur. Derzeit forscht er an der Universität Bremen: In der Internationalen Graduiertenschule für Dynamik in der Logistik schreibt er an seiner Doktorarbeit.

Nach der Schulausbildung in Teheran und dem anschließenden Bachelor in „Industrial Engineering" an der dortigen Universität zog es Afshin Mehrsai in die Welt hinaus, die zunehmend zu einem Dorf geworden ist. „Wenn man sich beruflich entwickeln möchte, braucht man heutzutage Auslandserfahrungen", sagt der 29-Jährige. „Gerade in der Ingenieursbranche sind internationale Kontakte äußerst wichtig."

Zunächst ging Afshin Mehrsai nach Berlin. Dort erwarb er an der Technischen Universität der Hauptstadt einen Mastertitel im Themengebiet „Global Production Engineering". Zielstrebig zog er das Masterstudium durch: „Ich will immer alles sehr schnell schaffen. Die Kurse aus zwei Jahren hatte ich bereits nach zwölf Monaten absolviert. Dadurch konnte ich dann statt der vorgeschriebenen zwei Monate gleich neun Monate Praktikum machen." Rund zwei Monate davon absolvierte er in einem Berliner Fraunhofer-Institut, weitere sieben in Hannover bei der Contitech AG, einer Tochterfirma des Reifenherstellers Continental.

Dass er nun in der Bremer Uni seine wissenschaftliche Karriere fortsetzte, lag an dem guten Angebot der International Graduate School for Dynamics in Logistics, die der Bremer Forschungsverbund LogDynamics vor einigen Jahren eingerichtet hat. Ansatz dieses strukturierten Doktorandenprogramms ist es, die Ingenieurspromotion zu internationalisieren – und dies auf einem interdisziplinären Themengebiet, das vielleicht wie kein zweites dazu geeignet ist: der Logistik. Finanziell unterstützt wird er mit einem Stipendium für drei Jahre von der Bremer Kieserling-Stiftung, die Wissenschaft und Forschung mit dem inhaltlichen Schwerpunkt Verkehrswirtschaft und Logistik fördert.

In seiner Dissertation beschäftigt sich Afshin Mehrsai mit der Machbarkeit von autonomen logistischen Prozessen, an denen im Forschungsverbund LogDynamics gearbeitet wird. Die Idee dahinter ist, logistische Abläufe zu optimieren und erleichtern: Objekte innerhalb des Prozesses sollen eines Tages ohne Einflussnahme von außen selbst entscheiden, welches Verhalten das beste und sinnvollste ist. „Ob das tatsächlich in ganz normalen Betrieben umsetzbar ist, ist eine andere Frage – und der gehe ich nach", sagt Mehrsai. Er arbeitet dazu sehr viel mit Simulationen im PC, bei denen unter anderem „lernende Paletten" eine wichtige Rolle spielen.