

Oscar Beijbom

CONTACT	UCSD/CSE EBU3b Rm. 4148 9500 Gilman Drive, Dept 0404 La Jolla, CA 92093	+1 (858) 888 - 2189 http://vision.ucsd.edu/~beijbom/website oscar.beijbom@gmail.com
EDUCATION	University of California, San Diego Ph.D. in Computer Science, expected graduation date: June 2015 M.S. in Computer Science, June 2012 Lund University B.S. & M.S. in Engineering Physics, March 2007. GPA 4.9 (3-5 scale)	
ACADEMIC EXPERIENCE	Department of Computer Science, UCSD San Diego, USA	<i>Graduate Student Researcher</i> September 2009 - Advisor: Professor David Kriegman. PhD thesis topic: <i>Annotating the worlds oceans: computer vision methods for scientific data analysis</i> . Research agenda include: <ul style="list-style-type: none">• Texture based recognition & segmentation in organic images.• Cost sensitive learning for Support Vector Machines and Boosting.• Underwater color correction methods for computer vision.• CoralNet: a web tool for automated underwater image annotation.
	Department of Mathematics, Lund University Lund, Sweden	<i>M.S. Thesis Scholar</i> September 2006 - March 2007 Advisor: Professor Karl Åström. I completed my Master's thesis at a company in Lund, Sweden: Cellavision AB. Cellavision manufactures equipment for automatic analysis of blood smears. Thesis title: "Single image focus level assessment using Support Vector Machines". [www.cellavision.com] <ul style="list-style-type: none">• Developed novel method for autofocus that utilize a multi-class machine learning methodology and low-level image features, including color and textures. The method is protected with an international patent, and it's implemented in the Cellavision products. The Master's thesis report received several awards.• Worked with Cellavision engineers to collect train and test data.
	Department of Mathematics Lund, Sweden	<i>Research Assistant</i> March 2007 - June 2007 SME-robot is a large, international EU financed project. [www.smerobot.org] <ul style="list-style-type: none">• Worked on robot camera calibration using structure from motion.
PROFESSIONAL EXPERIENCE	Hövdning AB Malmö, Sweden	<i>Head of Research</i> June 2007 - September 2009 I was the first employee at Hövdning, the company behind the "invisible" bicycle helmet with the same name. The helmet is a collar that is worn around the neck. It contains a folded up airbag that inflates and protects the user in the event of an accident. Hövdning received the 2011 Index award. [www.hovding.com] <ul style="list-style-type: none">• Responsible for hardware and software development for the accident detection system. The developed algorithm read data in real-time from motion sensors and sends a signal to the airbag if the user is in an accident. International patent is pending.• Managed large-scale data collection with stunt actors and students.• Worked with subcontractors to develop and identify electronic components• Hired, and managed a team of engineers.

	McKinsey & Company Stockholm, Sweden McKinsey is a management consulting firm, advising corporations, banks, and holding companies on strategic and tactical issues. [www.mckinsey.com]	<i>Junior Consultant</i> June 2005 - September 2005
	<ul style="list-style-type: none"> • Worked in a small team to quickly collect and analyze data for tasks such as mergers & acquisitions, procurement, and marketing. 	
TEACHING EXPERIENCE	Department of Computer Science, UCSD San Diego, USA	<i>Teaching Assistant</i> 2013 -
	<ul style="list-style-type: none"> • <i>Introduction to Computer Vision</i>. Prepared and graded homework assignments, led sections, and had QA sessions. 	
	Lund University Lund, Sweden	<i>Graduate student instructor</i> 2001 - 2004
	As a graduate student instructor I was responsible for planning and leading classes & session in a number of courses at the departments of Mathematics, Mechanics and Computer Science. [www.maths.lth.se]	
	<ul style="list-style-type: none"> • Linear Algebra • Calculus • Static and Dynamic mechanical systems • Programming in Java 	
PUBLICATIONS & PATENTS	O. Beijbom, P.J. Edmunds, D.I. Kline, G.B. Mitchell, D. Kriegman. <i>"Automated Annotation of Coral Reef Survey Images"</i> . IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Providence, Rhode Island, 2012. O. Beijbom. <i>"Domain Adaptations for Computer Vision Applications"</i> . Research exam: University of California San Diego, arXiv:1211.4860, April 2012. O. Beijbom. <i>"A method, device, and computer program product for event detection while preventing misclassifications"</i> (W83960002). International filing date: 20.07.2009. S. Hedlund, O. Beijbom, M. Almers. <i>"A method for determining an in-focus position and a vision inspection system"</i> (PCT/EP20008/051993). International filing date: 19.02.2008. O. Beijbom. <i>"Single Image Focus Level Assessment Using Support Vector Machines"</i> . Master's Thesis Report, Lund University, 2007.	
CONFERENCE TALKS	O. Beijbom, T. Treibitz, B. P. Neal, D. Kriegman, S. Belongie, P.J.Edmunds, D.I.Kline, B.G.Mitchell, <i>"Automated Coral Reef Image Annotation Using Computer Vision"</i> , International Coral Reef Symposium, 2012. O. Beijbom, T. Treibitz, B. P. Neal, D. Kriegman, S. Belongie, P. J. Edmunds, D. I. Kline, B. G. Mitchell, <i>"Automated Coral Reef Analysis Using Computer Vision"</i> , American Society of Limnology and Oceanography Aquatic Sciences Meeting, 2011.	
SERVICES	Östgöta Nation Student Choir Lund, Sweden The Östgöta Nation Student Choir student choir at Lund University with ~ 50 singers.	<i>Chairman</i> 2004 - 2005
	<ul style="list-style-type: none"> • Hired a new conductor. • Organized concerts and events. • Planned the repertoire. 	

Tekonomorden

Lund, Sweden

Founder

2002 - 2005

Tekonomorden brings economics and engineering students together by arranging exclusive dinners for invited members every semester.

- Cofounders, and event planner.

**HONORS &
AWARDS**

Selection of received scholarships and awards:

- **Scholar, BLANCEFLOR foundation**, 2012
- **Scholar, Lars Hiertas Minne foundation**, 2011 & 2012
- **Best master thesis in networked vision**, Axis communications, 2009
- **Outstanding master thesis award**, Sparbankstiftelsen Skåne, 2007
- **Grant for graduate studies abroad**, Sparbankstiftelsen Färs och Frosta, 2007

SKILLS

Languages: Native Swedish, fluent English, good Spanish and German

Computers: MATLAB, C, Java, Python, Prolog, OCaml, Vim