

Thomas Hardahl

Date of birth 16th of May 1980
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Strengths

- Great ability to assess and analyse complex problems.
- Great analytical ability in designing solutions to technical problems.
- Excellent presentation and communication skills.
- Energetic, outgoing and easily adaptable.

Education

Aalborg University, Department of Business Studies

Sept. 2006 – Present

Graduate Diploma in Business Administration (GDBA)

GPA 4.4 (US Equivalent D)

- Part 1 finalized, including following courses
 - Commercial Law
 - Statistics
 - Information Technology & Economics
 - Business Economics
 - Economics
 - Final project (Business economics model)
- Part 2 of Marketing Management first year finalized
 - General Marketing Economics,
 - Behavioural Theory and Consumer Economics
 - Marketing communications Theory
 - Marketing Research
 - Producer Economics and Competitor Behaviour
 - Organizational Theory

GPA 11.5 (US Equivalent B+)

Aalborg University, Department of Health Science and Technology

Sept. 2000 – June 2005

Bachelor and Master of Science in Biomedical Engineering
and Informatics

GPA 9.86 (US Equivalent B+)

Aalborg, Denmark

- Majored in Medical Signals and Systems.
- Courses include: Mathematics I, II, III and IV. Computer Science. Physics. Applied physics I and II. Circuit theory. Electromagnetism. Anatomy and Physiology. Internal medicine, theory and clinic. Surgery, theory and praxis. Probability Analysis. Statistics I and II. Biostatistics. Stochastic Processes I and II. Human – computer interaction. Medical Image Analysis I and II. Pattern Recognition I and II. Decision Support Systems I and II. Medical Imaging Systems.
- Project works include: Medical Technology Evaluation. Basic Medical Systems Design. Biomedical Instrumentation. Acquisition, Processing and Presentation of Biological Signals. Technology in the Health Care Sector – a 4 month internship at Aalborg Hospital. Advanced Medical Systems Design. Biomedical Signals. Biomedical Signals and Systems Design. For more information on these projects check out the description on www.hardahl.dk.

Oure Sports College

Sep. 1999 - Dec. 1999

Student at Alpine skiing, Ski-instructor
Valdisere, France & Oure, Denmark

Brønderslev Gymnasium

Aug. 1996 – Jun. 1999

Mathematical high school graduate

GPA 8.70 (US Equivalent B)

Brønderslev, Denmark

- Courses include highest level of mathematics and physics.

Working Experience

Aalborg University, Technology Transfer Office August 2007 – present
Technology Transfer Manager

- Responsible for commercialization of several inventions from Aalborg University, mainly in the biomedical area.
- Development of the Technology Transfer Office business plan
- Development of the University technology network. (www.uni-tech-net.com)

Aalborg University, Department of Health Science and Technology June 2006 – July 2007
Research Associate & Tech Transfer employee

- Responsible for the ongoing development and validation of the AALQTEC invention, in cooperation with GE Healthcare, Milwaukee
- Responsible for writing the technical part of the patent application
- Facilitation of the researchers at the Department of Health Science and Technology, in getting from idea to patent
- Co-operation with the Patent Office at Aalborg University, in the commercialization process of the submitted patents.
- Teaching task in innovation and creativity for the students at biomedical engineering and informatics.

Aalborg University, Technology Transfer Office July 2004 – June 2006
Research Associate, Aalborg, Denmark

- Responsible for the ongoing development and validation of the AALQTEC invention, in cooperation with GE Healthcare, Milwaukee.
- Responsible for writing the technical part of the patent application.

GE Healthcare, Information Technologies Feb. 2005 – Apr. 2005
Guest Researcher, Milwaukee, USA & Freiburg, Germany

- Employed by Aalborg University, Denmark to perform co-development with engineers from GE Healthcare Information Technologies
- Responsible for the software integration and refinement of the AALQTEC-system: "A system and method for analyzing ECG curvature".
- Located in Milwaukee, USA for 1,5 month and Freiburg, Germany for 1,5 month

Nightclub Pakhuset Jun.1999 – Aug. 2006
Manager of Bar, Løkken, Denmark

- Managed and operated 5 bars in the summer season nightclub.
- Responsible for overall sale in the bars, organizing work schedule and staff meeting.
- Part of the advertising and event-maker team.

Kvickly Aalborg Nov. 2000 – Jun. 2004
Sales assistant, Aalborg

- Spare time job as sales assistant in Kvickly supermarket.
- Responsible for fruit and green department from midday until closure.

PN Beslag Feb. 2000 – Jun 2000
Factory worker, Brønderslev

- Full time job as a factory worker
- Engaged in producing various fittings on a number of different punching and rivet machines

Q8 gasstation May 1998 – Sep 1999
Sales assistant, Brønderslev

- Spare time job as sales assistant at a Q8 gasstation
- Responsible for sale of gasoline and merchandise in the associated shop.

Kvickly Brønderslev Oct.1995 – May 1998
Sales assistant, Brønderslev

- Spare time job as service personnel and checkout operator in Kvickly supermarket.

Publications

Refereed contributions:

A robust method for quantification of I_{Kr}-related T-wave morphology abnormalities

MP Andersen, J.Q. Xue, C. Graff, **T. Hardahl**, E. Toft, J.K. Kanters, M. Christiansen, H.K. Jensen, JJ. Struijk.

Computers in Cardiology 2007; vol. 34, p. 341-344

Independent novel T-wave descriptors of repolarization

C. Haarmark, C. Graff, M.P. Andersen, **T. Hardahl**, JJ. Struijk, E. Toft, J. Q. Xue, I. Rowlandson.

Journal of Electrocardiology 2007, vol. 40, no. 6S, p. 131.

Repeatability of T-wave morphology measurement

M.P. Andersen, J.Q. Xue, C. Graff, **T. Hardahl**, M. Christiansen, E. Toft, J.K. Kanters, JJ. Struijk.

Journal of Electrocardiology 2007, vol. 40, no. 6S, p. 81.

T-wave convexity measure outperforms notch criterion as diagnostic marker for the HERG genotype.

C. Graff, J.Q. Xue, M.P. Andersen, J.K. Kanters, **T. Hardahl**, E. Toft, M. Christiansen, JJ. Struijk.

Journal of Electrocardiology 2007, vol. 40, no. 6S, p. 82-83.

Classification of the long-QT syndrome based on discriminant analysis of T-wave morphology,

JJ. Struijk, JK. Kanters, MP. Andersen, **T. Hardahl**, C. Graff, M. Christiansen, E. Toft

Medical & Biological Engineering & Computing 2006, vol. 44, no. 7, p. 543-549.

Long QT syndrome genotyping by electrocardiography: fact fiction, or something in between ?,

JK. Kanters, C. Graff, MP. Andersen, **T. Hardahl**, E. Toft, , M. Christiansen, PE. Bloch, JJ. Struijk

Journal of Electrocardiology, 2006; vol. 39, no. 4, p. 119-122.

Classification of the Long-QT Syndrome based on discriminant Analysis of T-wave Morphology.

JJ Struijk, JK. Kanters, MP. Andersen, **T Hardahl**, C. Graff, M. Christiansen, E. Toft.

Computers in Cardiology 2005; vol. 32: p. 511-514

Unrefereed contributions:

Classification Of The Long-QT Syndrome Based On T-Wave Morphology.

JK Kanters, MP Andersen, **T. Hardahl**, C Graff, M Christiansen, E. Toft, JJ. Struijk.

Congress of European Cardiac Arrhythmia Society (2005) (abstract)

Invited conference Contributions:

Genotyping by ECG: Fact, Fiction, or Something in Between?

JK Kanters, C Graff, MP Andersen, **T. Hardahl**, E. Toft , M. Christiansen, JJ. Struijk

International Society of Computerized Electrocardiography 2006(ISCE), (abstract accepted March 2006, article submitted April 2006)

Conference Contributions:

Electrocardiographic Biomarkers of I_{Kr} Channel Inhibition

C. Graff, J. Xue, MP. Andersen, JK Kanters, **T. Hardahl**, E. Toft, JJ. Struijk

International Society of Computerized Electrocardiography 2007 (ISCE), (poster presented april 2007)

A robust method for T wave morphology analysis

M.P. Andersen, C. Graff, J. Xue, **T. Hardahl**, E. Toft, JK Kanters, JJ. Struijk

International Society of Computerized Electrocardiography 2007 (ISCE), (poster presented april 2007)

T-wave morphology analysis identifies congenital and drug induced Long QT Syndrome

M.P. Andersen, J. Xue, C. Graff, **T. Hardahl**, M. Christiansen, E. Toft, JK Kanters, JJ. Struijk
2007 Summer Meeting, Danish Cardiovascular Research Academy

Patents

System and a method for analyzing ECG curvature

Inventors: **T. Hardahl**, C. Graff, MP. Andersen, E. Toft, JJ. Struijk, JJ. Kanters.

IPC: A61B5/0402

US2005177049 – 2005-08-11

A system and a method for analyzing ECG curvature for Long QT Syndrome and drug influence

Inventors: C. Graff, MP. Andersen, JK. Kanters, JJ. Struijk, E. Toft, **T. Hardahl**

EC: A61B5/0452

WO2005058156 – 2005-06-30

A system and a method for analyzing an ECG signal

EC: A61B5/0452 IPC: A61B5/0402; G06F17/00

EP1543770 – 2005-06-22

Awards

Venture Cup 2004 – Winner of Phase I of a national business plan competition for the development and presentation of the system “AALQTEC” for diagnosis of congenital and acquired Long QT Syndrome.

BioMedCommunity 2004 – Winner of a competition on application-oriented biomedical technology for the development and presentation of the system “AALQTEC” for diagnosis of congenital and acquired Long QT Syndrome.

Innovationscup.dk 2004 – Winner of engineering competition for young Danish engineers for developing a system for diagnosis of Normal Pressure Hydrocephalus.

Innovationscup.dk 2003 – Winner of engineering competition for young Danish engineers for developing an eye-controlled computer mouse.

Knowledge and Skills

Languages: Fluent – Danish, English; Good Working Knowledge – German.

IT Proficiency: Access, Excel, Microsoft Word, PowerPoint, Microsoft Project, Frontpage, Dreamweaver, Internet data mining, SPSS statistical software, Programming in Matlab, Turbo Pascal, C, Java, Labview and Visual Basic etc., Microsoft Visual Studio .NET

Extra-Curricular Activities

International Society of Computerized Electrocardiography (ISCE)

April 2008

Attendee, Riverside, California, USA

In the AALQTEC research group we submitted 2 posters to ISCE 2008, to present our research work in the field of congenital and drug induced long QT.

Annual Meeting in “The Association of University Technology Managers” (AUTM)

Feb. 2008

Attendee, San Diego, USA

Attendee at this early technology transfer meeting as a representative from the technology transfer department at Aalborg University.

Commercialization Camp 2007

Process guide

The scope of the Commercialization Camp was to identify new commercial aspects of patents already filled from the university. Students in the field of engineering and marketing participated in this camp, where my role was to guide them through the process with various innovative and creative tools.

- Bio Europe** Nov. 2007
Attendee, Hamburg, Germany
The conference participation had 2 main purposes, first to find interested collaborators and/or buyers for a drug delivery invention from Aalborg University. Another purpose was to find members for our university technology network.
- Bio Advanced Business Development Course** Nov. 2007
Course participants, Hamburg, Germany
This 3 day course is designed for business development professionals, in order to develop their skills in valuation, due diligence, negotiation and contracts.
- International Society of Computerized Electrocardiography (ISCE)** April 2007
Attendee, Cancun, Mexico
In the AALQTEC research group we submitted 3 posters to ISCE 2007, to present our research work in the field of congenital and drug induced long QT.
- Entrepreneurship and Innovation** Feb. 2007
Visiting lecturer, Aalborg University, Denmark
"Entrepreneurship and Innovation". Invited to give a lecture in entrepreneurship and innovation to the students at the Master in Innovation Knowledge and Economic dynamics/Entrepreneurship (MIKE).
- JuniorResearcherCafe on The Royal Veterinary and Agricultural University (KVL)** Sept. 2006
Guest Speaker, KVL, Copenhagen, Denmark
"From idea to utilization – The history about AALQTEC". Each month the JuniorResearcherCafe at KVL invites a guest speaker which have a special knowledge in a distinct research field, have made unique research work, etcetera. In order to inspire especially the students at KVL together with the employees.
- International Society of Computerized Electrocardiography (ISCE)** April 2006
Attendee, Niagara-on-the-lake, Canada
Jørgen Kanters from our research group was invited as speaker on ISCE 2006, to present our research work. I also attended the ISCE meeting with the rest of the research group, in order to hear about the newest research in the LQT field.
- Patents and IPR, Kickstart. Aalborg University** April 2006
Guest Speaker, Aalborg University, Denmark
"Patents and IPR: AALQTEC from idea to patent and beyond". Course for students at Aalborg University, about patents and IPR. Spoke on the process of taking a patent as a student and what consideration and should be thought in to the process.
- Course on Patents and commercialization, Rigshospitalet Copenhagen** October 2005
Course participants, Copenhagen, Denmark
The scope of the course was to give basic knowledge about patents and commercialization for researches in Denmark. The course stretched out on 2 full days. The course was arranged by Copenhagen Technology Transfer Consortium.
- Course on IPR and commercialization strategy, Kickstart Aalborg University** Oct 2005 – Nov.2005
Course participants, Aalborg, Denmark
The scope of the course was to give basic knowledge about IPR and how to use those rights in commercialization. The course stretched out on 7 evening sessions on 3 hours per session. The course was arranged by Kickstart, Aalborg University, the Patent and Contract office Aalborg University and the patent agency Patrade A/S.

Research weekend, Cardiology dept. Aalborg Hospital

January 2005

Guest Speaker, Gl. Vraa, Tylstrup, Denmark

“A computer system for analyzing ECG-curvatures. Diagnosis of congenital LQTS, and testing for acquired LQTS”. Scientific meeting for doctor’s from the cardiology department at Aalborg University Hospital. Review of the scientific projects going on at the hospital.

Connect-Denmark

September 2004

Guest Speaker, Aalborg, Denmark

“Commercialization of research from the university”; Meeting for prominent people from the universities and the industry, where the issue technology transfer from the university was discussed. Spoke on commercialization of a patent application, from a students perspective.

Rotary club

September 2004

Guest Speaker, Brønderslev, Denmark

Spoke on the education “Master of Science in Biomedical Engineering and Informatics” and about the invention of “A system and method for analyzing ECG curvature”.

Other Hobbies: Soccer, long distance running, skiing, golf, tennis, badminton, playing the guitar and traveling.