Dagsorden: aftagerpanelmøde for bachelor- og kandidatuddannelsen i Robotteknologi

Fredag d. 4. december 2015 kl. 12.30-15.30

Mødet afholdes: O TEK Seminarrum 30-603-2

Deltagere til mødet er: Mikkel Viager (Teknologisk Institut), Oluf Skov Nielsen (Universal Robots), Jens Nyeng Christiansen (Jorgensen Engineering), Niels Jul Jacobsen (MIR Robots), Thomas Nørby (B&R Automation), Ole Dolriis (SDU, Lektor, Uddannelseskoordinator), Henrik Gordon Petersen (SDU, Professor), Kjeld Jensen (SDU, Adjunkt), Jan Petersen (SDU, Lektor), Per Æbelø (SDU, Specialkonsulent, Kvalitetskoordinator), Karina T. Therkildsen (SDU, Studiesekretær)

Der er afbud fra:

Mødeleder: Ole Dolriis

Dagsorden

1. Velkomst *v/ Ole Dolriis*
    a. Introduktion til arbejdet i aftagerpanelet *v/Per Æbelø*
    b. Præsentationsrunde samt gensidig forventningsafstemning *v/ alle*
2. Status for uddannelsen *v/ Ole Dolriis*
3. Rundvisning på Teknisk Fakultet *v/ studerende Mia Hasanagic,* herunder præsentation robotlaboratorier
4. Debat, der kan inspireres af nedenstående spørgsmål
    a. Uddannelsens erhvervssigte i relation til samfundets og aftagernes behov
    b. Forventninger til fremtidig beskæftigelsessituation
    c. Rekrutteringsgrundlag jf. nøgletal
    d. Ønskede udviklingstiltag for uddannelsen jf. kompetenceprofil
    e. Andet
5. Eventuelt

Øvrig information

- Der vil være drikkevarer og sandwich med tilbehør ved ankomst, samt kaffe, frugt og kage efter rundvisningen
- Spørgsmål eller kommentarer kan rettes til fuldmægtig Tine Bernth Neumann på mail tibn@tek.sdu.dk eller telefon 65504286
- Skemaer til rejsegodtgørelser udleveres efter mødet

Vejviser

Oversigtskort over Syddansk Universitet kan forefindes her, det Tekniske Fakultet er bygningen i øverste højre hjørne.

Ved ankomst til Det Tekniske Fakultet anvendes indgang T (hovedindgang).
Elevator og trappe forefindes til venstre for hovedtrappen og tages til 1. sal; drej til højre, tag første gangsti til højre, herefter 2. gangsti til højre. Mødelokalet forefindes inde i hovedtrappen på 1. sal.

Ved tvivlsspørgsmål på dagen henvises der til Per Æbelø på nummer: 20 49 87 17

Kort om uddannelsen

CIVILINGENIØR I ROBOTTEKNOLOGI

www.sdu.dk/robotteknologi

Se film om uddannelsen

BY: Odense

Vil du være med i den rivende udvikling, der sker inden for informations- og robotteknologi, hvad enten det er udvikling af den underliggende elektronik eller de styrende programmer? Og er du interesseret i udvikling af komplekse elektroniske kredsløb til styring af robotbaserede produktionssystemer? Så er Robotteknologi et oplagt valg for dig. Du får kendskab til alle aspekter af den moderne informationsteknologi.
Med baggrund i grundfag som matematik, fysik, datalogi, elektronik og datateknik får du en dyb viden om hardware, software og deres samspil. Som robotingeniør bliver du i stand til at udnytte denne viden i nye sammenhænge. Specielt inden for de områder, hvor vi i dag ser en helt fantastisk udvikling med integration af computere i et væld af produkter og systemer. Uddannelsen giver dig nemlig en detaljeret forståelse for, hvordan en computer virker – og hvordan computerteknologi kan integreres i de højteknologiske apparater, vi omgiver os med nu og i fremtiden.

SEMESTERTEMAER
Hvert semester på bacheloruddannelsen er baseret på et hovedtema:

1. Grundlæggende styring af robotter
2. Autonome robotter
3. Mobile robotsystemer
4. Regulering og kontrol af robotsystemer
5. Robotter i kontekst/Experts in Teams
6. Valgfrie studier/bachelorprojekt.

KARRIEREMULIGHEDER
Uddannelsen er bred, og du vil derfor kunne få job i mange forskellige informations- og robotteknologirelaterede brancher. Opgaverne varierer mellem softwareudvikling, udvikling af robotter og automatiseret produktion, mobiltelefoner, netværk samt billedbehandling og grafik. Du vil fx kunne få job som udviklingsingeniør, projektchef, udviklingschef, konsulent og forsker. Uddannelsen er internationalt anerkendt, og det er let at få arbejde i udlandet, hvis du har lyst til at prøve det. Du kan også vælge at læse videre til civilingeniør i Elektronik (s. 32).

ADGANGSKRAV
Bestået stx, hf, hhx, htx eller Adgangskursus i Odense/Sønderborg. Herudover skal du have Dansk A, Engelsk B og Matematik A plus én af følgende fagkombinationer: Fysik B og Kemi C, Fysik B og Bioteknologi A, Geovidenskab A og Kemi C.
Adgangsbegrænsning: 60 studiepladser. Ansøgere i kvote 2 vil blive vurderet på baggrund af: • Karaktergennemsnit af følgende fag: Matematik A, Dansk A, Engelsk B, Fysik B, Kemi C eller Bioteknologi A • En motiveret ansøgning • CV • Praksiserfaring fx studierelevant erhvervsarbejde eller anden uddannelse.

FAG PÅ 1. ÅR
Grundlæggende styring af robotter. Autonome robotter. Semesterprojekter.

Erhvervssigte for uddannelsen (Bachelor)

Robotteknologi er en multidisciplinær ingeniøruddannelse, der sigter mod jobfunktioner, hvor en stor faglig viden om teknologiens samspil med omgivelserne er af afgørende betydning for succes. Dimittender ansættes primært til udviklingsopgaver i udviklingstunge produktionsvirksomheder og konsulentvirksomheder.
Bachelorer i robotteknologi arbejder bredt indenfor datateknologiske fagområder. Bl.a.:

- Robotsystemer
- Indlejrede systemer.
- Programmering og systemudvikling
- Kunstig intelligens
- Industriel automation

Kompetenceprofil for uddannelsen (Bachelor)

EN BACHELOR I TEKNISK VIDENSKAB (ROBOTTEKNOLOGI) HAR …
VIDEN OM
matematisk logik, matematiske regler, metoder og teknikker samt deres anvendelse i praktiske tekniske og fysiske sammenhænge, herunder viden om brugen af computerbaserede værktøjer inden for modellering og simulering.
teori, metoder og eksperimentel praksis inden for klassisk fysik (mekanik, termodynamik og elektromagnetisme). og moderne fysik (kvantemekanik og fysik om kondenserede stoffer).
passive og aktive elektriske komponenter og kan på baggrund heraf forstå og reflektere over teori, metoder og praksis inden for såvel analog som digital elektronik.
netværksarkitektur og -protokoller; transport-, netværks- og datalinklaget; netværkssikkerhed.
grundlæggende diskret-tid systemteori og de hyppigst anvendte matematiske metoder til digital og analog signalanalyse og signalbehandling.
objektorienteret programmering
Iterative og agile softwareudviklingsmetoder, UML, softwarearkitektur og designmønstre
indlejrede programmering herunder real-tidssystemer
operativsystemers opbygning og funktionalitet
reguleringsteknik
digital programmerbar elektronik
klassiske algoritmer og datastrukturer samt deres tids-kompleksitet
aktuelle forskningsområder indenfor robotdomænet (herunder computervision) samt markedet for kommercielle robotter og deres anvendelse
de vigtigste videnskabsteoretiske begreber, herunder etiske problemstillinger, og hvorledes disse bør iagttages i forbindelse med ingeniørarbejde
teori og praksis inden for projektstyring, herunder bl.a. deltagernes rollefordeling, samarbejdsproblematikker og kommunikation i projektgruppen
virksomhedsforståelse, herunder markedsanalyse, forretningsmodeller og budgetter.
FÆRDIGHEDER TIL AT KUNNE
udvælge og evaluere måleteknikker og -metoder på en videnskabelig baggrund i givne fysiske og tekniske sammenhænge
anvende fysiske lovmæssigheder samt matematiske metoder og redskaber til at analysere og modellere fysiske og elektriske komponenter/systemer og interaktionen imellem dem
designe, analysere, implementere og validere analoge

elektriske kredsløb med passive og aktive komponenter
designe og realisere digitale kombinatoriske kredsløb samt designe, programmere og interface indlejrede microprocessor-baserede systemer
anvende programmeringsteknikker, herunder skrive, dokumentere og implementere programmer med specifikke formål
beskrive og anvende de hyppigst anvendte metoder inden for digital signalanalyse og signalbehandling
designe applikationsprotokoller, have overblik over sikkerhed i computernetværk
redegøre for et antal softwareudviklingsmetoder og procesmodeller og har overblik over softwares livscyklus of softwarearkitektur
redegøre for de krav et indlejret system stiller til software og hvorledes dette håndteres i et givet programmeringssprog
specificere systemkomponenter til digital signalbehandling af analoge signaler og realisere digitale filtre og algoritmer
anvende et operativsystems funktionaliteter og services
håndtere og demonstrere projektorganiseret og udviklingsorienteret arbejdsmetoder såvel selvstændigt som i samspil og samarbejde med andre projektdeltagere med samme eller anden faglig eller kulturel baggrund samt dokumentere og formidle resultatet af arbejdet skriftligt på en forståelig, struktureret og reproducerbar form
anvende idédannelsesteknikker til at skitsere forretningsideer, som er innovative løsninger til definerede og afgrænsede problemstillinger, herunder analyse, udvikling og dokumentation af forretningsideernes kommercielle muligheder
KOMPETENCER TIL AT KUNNE
identificere, formulere og løse komplekse tekniske udviklingsopgaver i en samfundsmæssig og etisk kontekst
designe, udføre, vurdere og konkludere på eksperimentelt arbejde på videnskabeligt grundlag og niveau, herunder bedømme usikkerheder og fejlkilder
deltage professionelt i og samarbejde om faglige og tværfaglige projekter inden for videnskabeligt udviklingsarbejde, hvor metoder og redskaber fra uddannelsens centrale fag kommer i anvendelse, og hvor de anvendte arbejdsformer fordrer refleksion, samarbejde og selvstændighed
analysere, designe og validere systemer til digital signalbehandling af analoge signaler
udvikle et mindre it-system ved hjælp af en iterativ systemudviklingsmetode på baggrund af en specifikation
analysere I/O moduler, vurdere realtidsforhold i et indlejret system og udvikle hardwarenære programmer
identificere, strukturere og udbygge egne kompetencer gennem selvstændigt tilrettelagt læring, bl.a. ved brug af den nyeste litteratur

Erhvervssigte for uddannelsen (Kandidat)

Advanced Robotics Technology

The development in robot systems engineering requires engineers capable of working creatively across industrial disciplines and within research.

The Master's programme in Robot Systems Engineering ensures a broad research-based study of four robotics-related areas: computer vision, applied mathematics, artificial intelligence, and embedded systems. The breadth of the disciplines included in the programme provides the student with the skills and expertise required to make the robots of the future for production and service.

Graduates are employed mainly for research and development assignments in development-intensive manufacturing, service and consulting companies.

A Master of Science in Robot Systems Engineering with specialization in Advanced Robotics Technology works primarily in the private sector. In overall terms he or she works with:

- Research and development
- Implementation of research methodologies and research results
- Entrepreneurship and innovation
- Counselling and project management

Within

- The robotics industry
- Welfare technology
- Image processing
- Embedded systems
- General software system engineering and programming
- Mobile phones and web applications
- Mechanical engineering
- Security systems

Unmanned Aerial Systems Technology

The development in unmanned aerial systems (UAS) engineering (aka drone technology engineering) requires engineers capable of working creatively across industrial disciplines and within research.

The Master's programme in Robot Systems Engineering ensures a broad research-based study of four basic robotics-related areas: computer vision, applied mathematics, artificial intelligence, and embedded systems applicated in drone systems including mechanical disciplines. The breadth of the disciplines included in the programme provides the student with the skills and expertise required to make the drones for the future.

Graduates are employed mainly for research and development assignments in development-intensive manufacturing, service and consulting companies.

A Master of Science in Robot Systems Engineering with specialization in UAS Engineering works primarily in the private sector. In overall terms, he or she works with:

- Research and development
- Implementation of research methodologies and research results
- Entrepreneurship and innovation

- Counselling and project management

Within

- Aircraft navigation and path planning
- Autonomous behaviour
- Flight controllers
- Sensors and signal processing
- Image processing and computer vision
- Embedded systems
- Ground control systems
- Manipulators and actuators
- Aircraft software engineering
- Unmanned aircraft safety

Kompetenceprofil for uddannelsen (Kandidat)

THE GRADUATE IN ROBOT SYSTEMS ENGINEERING (ART) HAS …
KNOWLEDGE OF
Classical behaviour-based and embodied approaches to AI, state-space representational techniques, knowledge based action planning techniques and heuristics.
Analogue and digital electronic interfaces, sensors and actuators, state machines, FPGA, VHDL, communication interfaces.
Materials, Hooke's law, deformation, static and dynamic performance of materials, 3D printing, range of components, spectrum design problems.
Multivariate: distributions, hypothesis testing, variance, linear regression; Principal Component analysis, Factor analysis; grouping and clustering of multivariate observations.
Principles of the geometry and kinematics in robot and vision systems, homogeneous transformation, camera-scene calibration, trajectory calibration, point-to-point robot planning algorithms; image characteristics, camera model and geometry, image and filtering operations, features and extraction processes, object recognition.
Machine learning techniques and their experimental challenges and demands.
VHDL coding style and layout, Xilinx ISE, Smart Compile, Schematic, Floorplanner, ModelSim, EDK, FPGA
Advanced algorithms for motion planning and path optimization, constrained and grasp planning, collision detection, shortest paths in dynamically changing graphs and robot dynamics
Camera models and multi camera systems, matching of image areas, 3D reconstruction and pose estimation, object recognition and tracking, structure from motion.
Scientific methods used in different fields, literature search and organization, hypothesis generation and testing, statistical test and real world applications.
Safety requirements for robotics installation interface to MES layer, communication protocols with external equipment, OEE measurement, project planning and management with SCRUM, financial aspects of robot systems.
SKILLS TO
Design and implement solutions to non-trivial search-based problems, interface AI software and robotic components,

devise simple but reliable robotic agents to support AI software..
Control an actuator, use interfaces for sensors and actuators, develop interfaces between analogue and digital electronics, and design interaction between hardware and software.
Use CAD tools and 3D printing equipment, specify actuator and transmission configurations and propose material and configurations for robotic applications.
Implement multivariate methods with relevant tool(s), calculate quantitative descriptive statistics for the methods and do inferential statistics for them.
Develop and use kinematic models for robots, position and rotation computation in 3D, handle camera calibration issues, represent robot tasks as trajectories, implement robot planning algorithms, use software tools for visualizing robots.
Apply image processing toolboxes, judge image degradation, select filters and apply them, select features for recognition, construct object recognition algorithms for 2D problems.
Implement AI techniques, devise suitable representations of data for machine learning techniques, and assess performance of machine learning techniques; write a scientific paper.
Write programs in programming languages such as HandelC, including localizing and mending timing problems.
Write algorithms for motion planning, path optimization and grasping, model the dynamics of a robot manipulator, and acquire new knowledge in course related research papers.
Extract 3D scene description using camera information, use 3D information for object recognition, pose estimation etc., and use redundant information to improve estimates.
Evaluate scientific papers, understand the value of standardization, benchmarking and controls, generate alternative explanations for experiments, validate research results by simple prototypes, understand the differences in methodologies across disciplines.
Understand the technological and architectural challenges by designing and implementing and integrating part of a robot system with multiple components, analyse problem and domain to determine best practice, prepare and manage a project plan and perform a feasibility study.
COMPETENCES TO …
Recognize problems for state-based AI, choose tools and methods for representing an AI problem in a state-based formulation, and select a search/planning algorithm for a knowledge-based problem.
Develop a functional system and combining knowledge and experience from the course theory and practice, document technical results.
Communicate with mechanical engineers about the mechanical aspects of robot systems design and identify the areas of a robot system that requires mechanical engineering expertise.
Plan and design experiments in a multivariate setting, analyze data using multivariate methods, perform model check, summarize and visualize the results of an analysis and conclude, and identify and apply multivariate statistics in relevant robot systems related domains.
Solve tasks involving forward and inverse kinematics, point-to-point planning, basic robot calibration and trajectory design.
Solve simple 2D computer vision and image restoration problems.
Identify robotic problems for machine learning, characterize a new AI technique, and evaluate reported applications of machine learning techniques in terms of results and methodology.

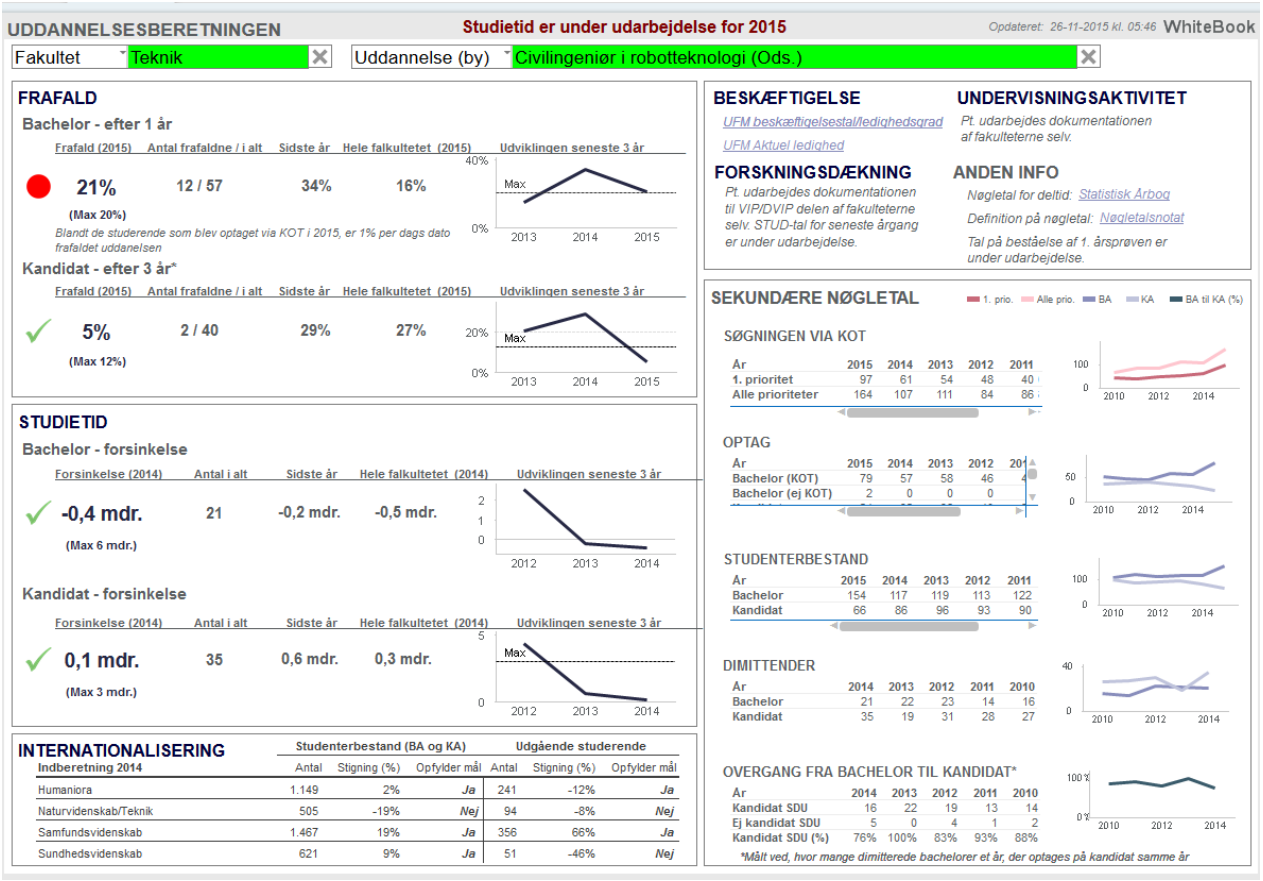
Develop applications on FPGA, present results in a scientific journal documenting and verifying that the implemented applications perform as expected.
Solve problems within robot motion and task planning using state of the art methods and evaluate the results in a scientific manner.
Solve 3D computer vision problems such as pose estimation, object tracking, structure from motion, 3D reconstructions and combinations thereof.
Apply the correct methodology for the chosen scientific topic.
Implement an industrial robot installation.

THE GRADUATE IN ROBOT SYSTEMS ENGINEERING (UAS) HAS …
KNOWLEDGE OF
Classical behavior-based and embodied approaches to AI, state-space representational techniques, knowledge based action planning techniques and heuristics.
Analogue and digital electronic interfaces, sensors and actuators, state machines, FPGA, VHDL, communication interfaces.
Aerodynamic properties, aircraft configuration and stability, propellers and rotors, and aircraft materials and mechanics..
Multivariate: distributions, hypothesis testing, variance, linear regression; Principal Component analysis, Factor analysis; grouping and clustering of multivariate observations.
Principles of the geometry and kinematics in robot and vision systems, homogeneous transformation, camera-scene calibration, trajectory calibration, point-to-point robot planning algorithms; image characteristics, camera model and geometry, image and filtering operations, features and extraction processes, object recognition.
Machine learning techniques and their experimental challenges and demands.
VHDL coding style and layout, Xilinx ISE, Smart Compile, Schematic, Floorplanner, ModelSim, EDK, FPGA
Advanced algorithms for motion planning and path optimization, constrained and landing planning, shortest paths in dynamically changing graphs.
Camera models, matching of image areas, 3D reconstruction and pose estimation, object recognition and tracking, structure from motion.
UAS: applications and current research; legislation; safety and risk assessment; airworthiness and certification; flight planning; related meteorology; platforms; flight controller hardware and software; navigation; wireless communication systems; power systems.
Scientific methods used in different fields, literature search and organization, hypothesis generation and testing, statistical test and real world applications.
Unmanned aerial system design, safety and Danish legislative requirements for UAS applications, financial aspects of UAS applications and agile project management.

SKILLS TO
Design and implement solutions to non-trivial search-based problems, interface AI software and robotic components, devise simple but reliable robotic agents to support AI software.
Control an actuator, use interfaces for sensors and actuators, develop interfaces between analogue and digital electronics, and design interaction between hardware and software.
Perform basic aerodynamic calculations and basic structural calculations; choose/develop the most appropriate aerodynamic and structural configuration.
Implement multivariate methods with relevant tool(s), calculate quantitative descriptive statistics for the methods and do inferential statistics for them.
Develop and use kinematic models for robots, position and rotation computation in 3D, handle camera calibration issues, represent robot tasks as trajectories, implement robot planning algorithms, use software tools for visualizing robots.
Apply image processing toolboxes, judge image degradation, select filters and apply them, select features for recognition, construct object recognition algorithms for 2D problems.
Implement AI techniques, devise suitable representations of data for machine learning techniques, and assess performance of machine learning techniques; write a scientific paper.
Write programs in programming languages such as HandelC, including localizing and mending timing problems.
Write algorithms for motion planning, path optimization and grasping, model the dynamics of a robot manipulator, test and document planning algorithms, adapt planning algorithms for specific use, path optimization, and acquire new knowledge in course related research papers.
Extract 3D scene description using camera information, use 3D information for object recognition, pose estimation etc., and use redundant information to improve estimates.
Apply robotics skills to the design and development of unmanned aircrafts; show an overall understanding of the applicability of UAS technology to problems in different domains.
Evaluate scientific papers, understand the value of standardization, benchmarking and controls, generate alternative explanations for experiments, validate research results by simple prototypes, understand the differences in methodologies across disciplines.
Develop and follow a project plan based on agile principles, estimate the feasibility of implementing a UAS application in a real-life scenario using cost/benefit analysis as well as safety analysis, design and implement a UAS application consisting of an unmanned aircraft collaborating with other entities such as ground control, pilot etc., develop and integrate new aircraft and payload systems, interface to and extend the functionality of existing flight controller software.
COMPETENCES TO …
Recognize problems for state-based AI, choose tools and methods for representing an AI problem in a state-based formulation, and select a search/planning algorithm for a knowledge-based problem.

Develop a functional system and combining knowledge and experience from the course theory and practice, document technical results.
Initiate and carry out work within the UAS field, including interdisciplinary collaboration and manage complex and unpredictable development within UAS; take personal responsibility for professional development and specialization within UAS.
Plan and design experiments in a multivariate setting, analyze data using multivariate methods, perform model check, summarize and visualize the results of an analysis and conclude, and identify and apply multivariate statistics in relevant robot systems related domains.
Solve tasks involving forward and inverse kinematics, point-to-point planning, basic robot calibration and trajectory design.
Solve simple 2D computer vision and image restoration problems.
Identify robotic problems for machine learning, characterize a new AI technique, and evaluate reported applications of machine learning techniques in terms of results and methodology.
Develop applications on FPGA, present results in a scientific journal documenting and verifying that the implemented applications perform as expected.
Solve problems within robot motion and task planning using state of the art methods and evaluate the results in a scientific manner.
Solve 3D computer vision problems such as pose estimation, object tracking, structure from motion, 3D reconstructions and combinations thereof.
Apply the correct methodology for the chosen scientific topic.
Participate in finding technical applicable solutions to the design and development of UAS subsystems and payload modules; contribute to the development in research and industrial UAS projects.
Participate in UAS research and industrial projects focusing on development while understanding the interplay with safety, legislative, financial and project management aspects.

Nøgletal for uddannelsen



UDDANNELSESBERETNINGEN

Studietid er under udarbejdelse for 2015

Opdateret: 26-11-2015 kl. 05:46 WhiteBook

Fakultet: Teknik

Uddannelse (by): Civilingeniør i robotteknologi (Ods.)

FRAFALD

Bachelor - efter 1 år

Frafald (2015)	Antal frafaldne / i alt	Sidste år	Hele falkultetet (2015)
21% (Max 20%)	12 / 57	34%	16%

Udviklingen seneste 3 år: 40% / 0%, Max, 2013 2014 2015

Blandt de studerende som blev optaget via KOT i 2015, er 1% per dags dato frafaldet uddanelsen

Kandidat - efter 3 år*

Frafald (2015)	Antal frafaldne / i alt	Sidste år	Hele falkultetet (2015)
5% (Max 12%)	2 / 40	29%	27%

Udviklingen seneste 3 år: 20% / 0%, Max, 2013 2014 2015

STUDIETID

Bachelor - forsinkelse

Forsinkelse (2014)	Antal i alt	Sidste år	Hele falkultetet (2014)
-0,4 mdr. (Max 6 mdr.)	21	-0,2 mdr.	-0,5 mdr.

Udviklingen seneste 3 år: 2 / 1 / 0, 2012 2013 2014

Kandidat - forsinkelse

Forsinkelse (2014)	Antal i alt	Sidste år	Hele falkultetet (2014)
0,1 mdr. (Max 3 mdr.)	35	0,6 mdr.	0,3 mdr.

Udviklingen seneste 3 år: 5 / 0, Max, 2012 2013 2014

INTERNATIONALISERING

Indberetning 2014	Studenterbestand (BA og KA) Antal	Stigning (%)	Opfylder mål	Udgående studerende Antal	Stigning (%)	Opfylder mål
Humaniora	1.149	2%	*Ja*	241	-12%	*Ja*
Naturvidenskab/Teknik	505	-19%	*Nej*	94	-8%	*Nej*
Samfundsvidenskab	1.467	19%	*Ja*	356	66%	*Ja*
Sundhedsvidenskab	621	9%	*Ja*	51	-46%	*Nej*

BESKÆFTIGELSE

UFM beskæftigelsestal/ledighedsgrad

UFM Aktuel ledighed

UNDERVISNINGSAKTIVITET

Pt. udarbejdes dokumentationen af fakulteterne selv.

FORSKNINGSDÆKNING

Pt. udarbejdes dokumentationen til VIP/DVIP delen af fakulteterne selv. STUD-tal for seneste årgang er under udarbejdelse.

ANDEN INFO

Nøgletal for deltid: Statistisk Årbog

Definition på nøgletal: Nøgletalsnotat

Tal på beståelse af 1. årsprøven er under udarbejdelse.

SEKUNDÆRE NØGLETAL

1. prio. Alle prio. BA KA BA til KA (%)

SØGNINGEN VIA KOT

År	2015	2014	2013	2012	2011
1. prioritet	97	61	54	48	40
Alle prioriteter	164	107	111	84	86

100 / 0, 2010 2012 2014

OPTAG

År	2015	2014	2013	2012	201
Bachelor (KOT)	79	57	58	46	4
Bachelor (ej KOT)	2	0	0	0	

50 / 0, 2010 2012 2014

STUDENTERBESTAND

År	2015	2014	2013	2012	2011
Bachelor	154	117	119	113	122
Kandidat	66	86	96	93	90

100 / 0, 2010 2012 2014

DIMITTENDER

År	2014	2013	2012	2011	2010
Bachelor	21	22	23	14	16
Kandidat	35	19	31	28	27

40 / 0, 2010 2012 2014

OVERGANG FRA BACHELOR TIL KANDIDAT*

År	2014	2013	2012	2011	2010
Kandidat SDU	16	22	19	13	14
Ej kandidat SDU	5	0	4	1	2
Kandidat SDU (%)	76%	100%	83%	93%	88%

100 % / 0 %, 2010 2012 2014

*Målt ved, hvor mange dimitterede bachelorer et år, der optages på kandidat samme år