| No. | Research area | Title of the research | Website | Name of supervisor | Title of the supervisor | Requirements for applicants: Master's / Ph.D. Student | Total number of acceptance per supervisor | Duration : 2-6months (less than 180days) | Comments |
|------|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|----------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. P | Principles of Informatics R | esearch Division | | | | | | 1 | |
| 1 | AI | Formalization of Legal Reasoning | http://research.nii.ac.jp/~ksatoh/ | Ken Satoh | Professor | PhD students | 4 | 2-6 months | knowledge of logic programming and legal reasoning is required |
| 2 | AI | Formalization and Implementation of Speculative Computation | http://research.nii.ac.jp/~ksatoh/ | Ken Satoh | Professor | PhD students | 4 | 2-6 months | knowledge of logic programming and default reasoning is required |
| 3 | AI | Formalization of Argumentation System | http://research.nii.ac.jp/~ksatoh/ | Ken Satoh | Professor | PhD students | 4 | 2-6month | knowledge of logic programming and argumentation semantics is required |
| 4 | Artificial Intelligence / Web Informatics | Semantic Web / Linked Data / Linked Open Data | http://lod.ac http://www-kasm.nii.ac.jp/ | Hideaki Takeda | Professor | Master 's or PhD students | 3 | 3-6months | |
| 5 | Artificial Intelligence / Web Informatics | Social Web / Social Media Analysis / Social Network Analysis | http://www-kasm.nii.ac.jp/ | Hideaki Takeda | Professor | Master 's or PhD students | 3 | 3-6months | |
| 6 | Artificial Intelligence | Articiial Social Intelligence: building intelligence systems with social knowledge and social interaction | | Hideaki Takeda | Professor | Master 's or PhD students | 3 | 3-6months | |
| 7 | Abduction / Inductive Logic Programming | Discovery by Meta-Level Abduction | http://research.nii.ac.jp/il/ | Katsumi Inoue | Professor | Master's or PhD students | 4 | 3–6 months | Basic knowledge of AI and/or ILP is required. Contact Prof. Inoue in advance. |
| 8 | Automated Reasoning | Tensor-Based Reasoning | http://research.nii.ac.jp/il/ | Katsumi Inoue | Professor | Master's or PhD students | 4 | 3–6 months | Basic knowledge of Logic Programming and programming skills are required. Contact Prof. Inoue in advance. |
| 9 | Automated Reasoning / Constraint Satisfaction | Answer Set Programming / Constraint Programming / Satisfiability Testing | http://research.nii.ac.jp/il/ | Katsumi Inoue | Professor | Master's or PhD students | 4 | 3–6 months | Basic knowledge of ASP/CP/SAT and Computer Programming is required. Contact Prof. Inoue in advance. |
| 10 | Boolean Networks / System Dynamics | Learning, Modeling and Reasoning of Dynamic Systems | http://research.nii.ac.jp/il/ | Katsumi Inoue | Professor | Master's or PhD students | 4 | 3–6 months | Basic knowledge of AI is required. Additionally, some background in Biological Modeling, Cellular Automata, Control Theory, or Model Checking is useful. Contact Prof. Inoue in advance. |
| 11 | Multi-Agent Systems / Decision Making | Multi-Objective (Distributed) Constraint Optimization Problems | http://research.nii.ac.jp/il/ | Katsumi Inoue | Professor | Master's or PhD students | 4 | 3–6 months | Basic knowledge of AI and Computer Programming is required. Contact Prof. Inoue in advance. |
| 12 | Numerical Linear Algebra | Iterative solution of systems of linear equations, (constrained) least squares problems, ill-posed problems | http://researchmap.jp/KenHayami/?lang =english http://www.nii.ac.jp/TechReports/public _html/16-001E.pdf | Ken Hayami | Professor | Master's or Ph.D students | 2 | 3-6 months | Knowledge of (numerical) linear algebra and programming required. |
| 13 | Inverse Problems | Application and extension of the Cluster Newton method for parameter identification in pharmakokinetics | http://researchmap.jp/KenHayami/?lang =english http://www.nii.ac.jp/TechReports/11- 002E.html | Ken Hayami | Professor | Master's or PhD students | 2 | 3-6 months | Basic knowledge in numerical analysis and skill in MATLAB required. |

| No. | Research area | Title of the research | Website | Name of supervisor | Title of the supervisor | Requirements for applicants: Master's / Ph.D. Student | Total number of acceptance per supervisor | Duration : 2-6months (less than 180days) | Comments |
|-------|-----------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------|-------------------------|----------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14 | Artificial Intelligence | Machine Learning for Advanced Driving Assistance Systems | http://ri-www.nii.ac.jp/ | Ryutaro Ichise | Associate Professor | Master's or PhD students | 4 | 3-6 months | |
| 15 | Artificial Intelligence | Relational Learning for Knowledge Graph / Linked Data | http://ri-www.nii.ac.jp/ | Ryutaro Ichise | Associate Professor | Master's or Ph.D students | 4 | 3-6 months | |
| 16 | Artificial Intelligence | Data Mining for Large Scale Web Data | http://ri-www.nii.ac.jp/ | Ryutaro Ichise | Associate Professor | Master'sor Ph.D students | 4 | 3-6 months | |
| 17 | Quantum computation and communication | Computer archtecture for quantum information processing | http://www.qis.ex.nii.ac.jp/ | Kae Nemoto | Professor | Master'sor Ph.D students | 3 | 2-6months | |
| 18 | Quantum computation and communication | Quantum devices | http://www.qis.ex.nii.ac.jp/ | Kae Nemoto | Professor | Master'sor Ph.D students | 3 | 2-6months | |
| 19 | Quantum systems | Analyses of large-scale quantum systems | | Kae Nemoto | Professor | Ph.D. | 3 | 2-6months | |
| 20 | Computational Neuroscience, Time series analysis | Datamining in Neuroscience | http://research.nii.ac.jp/~r- koba/en/index.html | Ryota Kobayashi | Assistant Professor | Master's or Ph.D students | 2 | 4-6 month | Applicants should have a strong interest in applications of information sciences to neuroscience. Basic knowledge of machine learning, signal processing, optimization, statistics, and/or applied mathematics will be appreciated. |
| 21 | Intelligent Robotics | Integration of Robot Simulation and Social Agent Simulation http://www.sigverse.org/ | http://www.sigverse.org/ | Tetsunari Inamura | Associate Professor | Master's or Ph.D students | 3 | 3-6 months | Requred skill: writing software in C++ |
| 22 | Intelligent Robotics | Concept Acquisition through interaction between Humans and Robots | | Tetsunari Inamura | Associate Professor | Master's or Ph.D students | 3 | 3-6 months | Requred skill: writing software in C++ |
| 23 | Cognitive Science | Research on sense of agency/ownership using immersive virtual reality | | Tetsunari Inamura | Associate Professor | Master's or Ph.D students | 3 | 3-6 months | |
| 2. In | formation Systems Archi | tecture Science Research Division | | | | | | ` | |
| 24 | Program Testing | Testing Known-Unknown Type Programs | http://researchmap.jp/nkjm/ | Shin Nakajima | Professor | Master's or Ph.D students | 2 | 2 - 6 months | Contact the supervisor for details before applying the internship program |
| 25 | Formal Methods | Refinement-based Modeling with Event-B | http://researchmap.jp/nkjm/ | Shin Nakajima | Professor | Master's or Ph.D students | 2 | 2 - 6 months | Contact the supervisor for details before applying the internship program |
| 26 | Formal Verification | Model-Checking of Causal Loops | http://researchmap.jp/nkjm/ | Shin Nakajima | Professor | Master's or Ph.D students | 2 | 2 - 6 months | Contact the supervisor for details before applying the internship program |

| No. | Research area | Title of the research | Website | Name of supervisor | Title of the supervisor | Requirements for applicants: Master's / Ph.D. Student | Total number of acceptance per supervisor | Duration : 2-6months (less than 180days) | Comments |
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| 14 | Artificial Intelligence | Machine Learning for Advanced Driving Assistance Systems | http://ri-www.nii.ac.jp/ | Ryutaro Ichise | Associate Professor | Master's or PhD students | 4 | 3-6 months | |
| 15 | Artificial Intelligence | Relational Learning for Knowledge Graph / Linked Data | http://ri-www.nii.ac.jp/ | Ryutaro Ichise | Associate Professor | Master's or Ph.D students | 4 | 3-6 months | |
| 16 | Artificial Intelligence | Data Mining for Large Scale Web Data | http://ri-www.nii.ac.jp/ | Ryutaro Ichise | Associate Professor | Master'sor Ph.D students | 4 | 3-6 months | |
| 17 | Quantum computation and communication | Computer archtecture for quantum information processing | http://www.qis.ex.nii.ac.jp/ | Kae Nemoto | Professor | Master'sor Ph.D students | 3 | 2-6months | |
| 18 | Quantum computation and communication | Quantum devices | http://www.qis.ex.nii.ac.jp/ | Kae Nemoto | Professor | Master'sor Ph.D students | 3 | 2-6months | |
| 19 | Quantum systems | Analyses of large-scale quantum systems | | Kae Nemoto | Professor | Ph.D. | 3 | 2-6months | |
| 20 | Computational Neuroscience, Time series analysis | Datamining in Neuroscience | http://research.nii.ac.jp/~r- koba/en/index.html | Ryota Kobayashi | Assistant Professor | Master's or Ph.D students | 2 | 4-6 month | Applicants should have a strong interest in applications of information sciences to neuroscience. Basic knowledge of machine learning, signal processing, optimization, statistics, and/or applied mathematics will be appreciated. |
| 21 | Intelligent Robotics | Integration of Robot Simulation and Social Agent Simulation http://www.sigverse.org/ | http://www.sigverse.org/ | Tetsunari Inamura | Associate Professor | Master's or Ph.D students | 3 | 3-6 months | Requred skill: writing software in C++ |
| 22 | Intelligent Robotics | Concept Acquisition through interaction between Humans and Robots | | Tetsunari Inamura | Associate Professor | Master's or Ph.D students | 3 | 3-6 months | Requred skill: writing software in C++ |
| 23 | Cognitive Science | Research on sense of agency/ownership using immersive virtual reality | | Tetsunari Inamura | Associate Professor | Master's or Ph.D students | 3 | 3-6 months | |
| 2. Iı | nformation Systems Archi | tecture Science Research Division | | | | | | | |
| 24 | Program Testing | Testing Known-Unknown Type Programs | http://researchmap.jp/nkjm/ | Shin Nakajima | Professor | Master's or Ph.D students | 2 | 2 - 6 months | Contact the supervisor for details before applying the internship program |
| 25 | Formal Methods | Refinement-based Modeling with Event-B | http://researchmap.jp/nkjm/ | Shin Nakajima | Professor | Master's or Ph.D students | 2 | 2 - 6 months | Contact the supervisor for details before applying the internship program |
| 26 | Formal Verification | Model-Checking of Causal Loops | http://researchmap.jp/nkjm/ | Shin Nakajima | Professor | Master's or Ph.D students | 2 | 2 - 6 months | Contact the supervisor for details before applying the internship program |

| No. | Research area | Title of the research | Website | Name of supervisor | Title of the supervisor | Requirements for applicants: Master's / Ph.D. Student | Total number of acceptance per supervisor | Duration : 2-6months (less than 180days) | Comments |
|-----|------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------|-------------------------|----------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 27 | Software Engineering | Adaptive Software System Engineering and Bidirectional Trasnformation | http://research.nii.ac.jp/~hu | Zhenjiang Hu | Professor | Master's or Ph.D students | 4 | 2-6 months | Intereted in developing practical software systems |
| 28 | Programming Languages | Design and Implementation of Bidirectional Transformationl Languages | http://research.nii.ac.jp/~hu | Zhenjiang Hu | Professor | Master's or Ph.D students | 4 | 2-6 months | Familiar with functional languages such as Haskell or Ocaml |
| 29 | Parallel Programming | High-Level Parallel Programming and Big Data Processing | http://research.nii.ac.jp/~hu | Zhenjiang Hu | Professor | Master's or Ph.D students | 4 | 2-6 months | Has experiences of writing parallel programs |
| 30 | wireless networks | resource management and quality of service in wireless networks | http://klab.nii.ac.jp/ | Yusheng Ji | Professor | Master's or Ph.D students | 4 | 3-6 months | Basic understanding on infrastructure-based and/or ad hoc wireless communication systems is expected |
| 31 | wireless networks | ad hoc/sensor networks (e.g., vehicular communications, IoT) | http://klab.nii.ac.jp/ | Yusheng Ji | Professor | Master's or Ph.D students | 4 | 3-6 months | Basic understanding on infrastructure-based and/or ad hoc wireless communication systems is expected |
| 32 | network architecture | ICN, CCN, SDN, NFV | http://klab.nii.ac.jp/ | Yusheng Ji | Professor | Master's or Ph.D students | 4 | 3-6 months | Understanding of internet architecture and protocols is required |
| 33 | resilient networking | robost networking for disaster situation | http://klab.nii.ac.jp/ | Yusheng Ji | Professor | Master's or Ph.D students | 4 | 3-6 months | Understanding of internet architecture and protocols is required |
| 34 | Hardware Design | Hardware Design for Brain Style Computing | http://www.nii.ac.jp/en/faculty/architect ure/yoneda_tomohiro/ | Tomohiro Yoneda | Professor | Master's or PhD students | 2 | 6 months | |
| 35 | Hardware Design | Design Tool for an Asynchronous FPGA | http://www.nii.ac.jp/en/faculty/architect ure/yoneda_tomohiro/ | Tomohiro Yoneda | Professor | Master's or Ph.D students | 2 | 6 months | |
| 36 | Self-adaptive Software | Model-driven development for self-adaptive software | http://www.honiden.nii.ac.jp/en/researc h/mdd-for-sas | Kenji Tei | Associate Professor | Master's or PhD students | 3 | 2-6 months | See the web site (http://www.honiden.nii.ac.jp/en/research/mdd-for-sas) |
| 37 | Computer network | Internet traffic measurement and analysis | http://www.fukuda-lab.org | Kensuke Fukuda | Associate professor | Master's or PhD students | 3 | 5-6 months | Solid programming skills in C/Python/Java. The end of intern period must be before 31st March 2017. |
| 38 | Computer network | Internet traffic visualization | http://www.fukuda-lab.org | Kensuke Fukuda | Associate professor | Master's students | 3 | 5-6 months | Solid programming skils in Javascript/Python/C. The end of intern period must be before 31st March 2017. |
| 39 | Computer network | Software defined networks | http://www.fukuda-lab.org | Kensuke Fukuda | Associate professor | Master's or PhD students | 3 | 5-6 months | Solid programming skills C/Python. The end of intern period must be before 31st March 2017. |

| No. | Research area | Title of the research | Website | Name of supervisor | Title of the supervisor | Requirements for applicants: Master's / Ph.D. Student | Total number of acceptance per supervisor | Duration : 2-6months (less than 180days) | Comments |
|-------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|----------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 40 | Gamification, Motivation | Motivational Methods for WillingRing (Software for Motivating Users to Start and Continue a Certain Activity based on Life Log Analysis) | http://goo.gl/xMePpN | Kazunori Sakamoto | Assistant Professor | Master's or PhD students | 6 | 2 -6 months | We welcome students who love programming and creative activities. E-mail: exkazuu@nii.ac.jp LinkedIn: http://goo.gl/em22I4 |
| 41 | Web Mining, Werable Devise | Collection and Analysis Methods for WillingRing (Software for Motivating Users to Start and Continue a Certain Activity based on Life Log Analysis) | http://goo.gl/xMePpN | Kazunori Sakamoto | Assistant Professor | Master's or PhD students | 6 | 2 -6 months | We welcome students who love programming and creative activities. E-mail: exkazuu@nii.ac.jp LinkedIn: http://goo.gl/em22I4 |
| 42 | Computer System Architecture | Interconnection Networks for Many-core Computing Systems | http://research.nii.ac.jp/~koibuchi/englis h/index.htmll | Michihiro Koibuchi | Associate Professor | Master's or PhD students | 1 | 4-6 months | |
| 43 | Programming Languages | Type error debugging of functional languages | http://link.springer.com/chapter/10.100 7%2F978-3-642-41582-1_12#page-1, http://www.is.ocha.ac.jp/~asai/TypeDeb ugger/ | Kanae Tsushima | Assistant Professor | Master's or PhD students | 3 | 3-6 months | Interested in developing practical software systems. |
| 44 | Programming Languages | Type error debugging using machine learning | http://researchmap.jp/tsushima/?lang=e nglish | Kanae Tsushima | Assistant Professor | Master's or PhD students | 3 | 3-6 months | Interested in programming languages and machine learning. |
| 45 | Programming Languages | Test case generation for typed languages | http://researchmap.jp/tsushima/?lang=e nglish | Kanae Tsushima | Assistant Professor | Master's or PhD students | 3 | 3-6 months | |
| 3. Di | igital Content and Media | Sciences Research Division | | | | | | | |
| 46 | computer vision | One of the following topics. (1) 3D vision, (2) Recognizing human activities, and (3) Gaze sensing and gaze navigation | http://www.dgcv.nii.ac.jp | Akihiro Sugimoto | Professor | Master's or Ph.D Student | 5 | Up to 6 months (at least 3 months; a longer period is better) | Rigorous background on mathematics is required. Programming skills on image processing and computer vision are also required. In the case of Master course students, highly motivated students who can stay for 6 months are preferable. Students who are willing to pursuit ph D at NII are preferable as well. Potential applicants should send your CV and research interests/proposals directly to Prof. Sugimoto before your application. |
| 47 | discrete geometry | (1) Discretization model of geometric shape, (2) Discrete shape fitting to noisy integer points. | http://www.dgcv.nii.ac.jp | Akihiro Sugimoto | Professor | Master's or Ph.D Student | 5 | Up to 6 months (at least 3 months) | Rigorous background on mathematics as well as computer vision is required. In particular, sufficient knowledge of linear algebra, graph theory and number theory are important requirements. Programming skills on image processing or computer vision are also required. Potential applicants should send your CV and research interests/proposals directly to Prof. Sugimoto before your application. |
| 48 | text mining | Text mining based on probabilistic model | http://www.ldear.nii.ac.jp/~takasu/en/ | Atsuhiro Takasu | Professor | Master's or Ph.D Student | 3 | 3-6 months | |
| 49 | Big Data | data analysis and mining methods for (sensor) big data | http://www.ldear.nii.ac.jp/~takasu/en/ | Atsuhiro Takasu | Professor | Master's or Ph.D Student | 3 | 3-6 months | |
| 50 | content-based image and video analysis | video and image semantic analysis and classification (esp. TRECVID SIN and LOC task. see: http://www-nlpir.nist.gov/projects/trecvid/) | http://research.nii.ac.jp/~satoh | Shin'ichi Satoh | Professor | Master's or Ph.D (Ph.D preferable) | 5 | more than 90 days | |

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|-----|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|----------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 51 | content-based image and video analysis | identification of specific object in video and image (esp. TRECVID instance search. see: http://www-nlpir.nist.gov/projects/trecvid/) | http://research.nii.ac.jp/~satoh | Shin'ichi Satoh | Professor | Master's or Ph.D (Ph.D preferable) | 5 | more than 90 days | |
| 52 | content-based image and video analysis | Event detection and action recognition (esp. TRECVID multimedia event detection task. see: http://www-nlpir.nist.gov/projects/trecvid/) | http://research.nii.ac.jp/~satoh | Shin'ichi Satoh | Professor | Master's or Ph.D (Ph.D preferable) | 5 | more than 90 days | |
| 53 | content-based image and video analysis | 3D video analysis (esp. obtained by Kinect) for human action recognition | http://research.nii.ac.jp/~satoh | Shin'ichi Satoh | Professor | Master's or Ph.D (Ph.D preferable) | 5 | more than 90 days | |
| 54 | Natural Language Processing | Syntactic/Semantic Parsing | http://kmcs.nii.ac.jp/mylab/ | Yusuke Miyao | Associate Professor | Master's or Ph.D Student | 3 | 6 months | Fundamental knowledge about one of the following areas is required: 1. statistical parsing methods (e.g. PCFG parsing, dependency parsing), or 2. syntactic theory (e.g. HPSG, CCG) |
| 55 | Natural Language Processing | Question Answering over Linked Data | http://kmcs.nii.ac.jp/mylab/ | Yusuke Miyao | Associate Professor | Master's or Ph.D Student | 3 | 6 months | Fundamental knowledge about one of the following areas is required: 1. structured machine learning methods (e.g. CRF, tree kernel methods), or 2. semantic web technologies (e.g. SPARQL) |
| 56 | Natural Language Processing | Vision and Text Processing | http://kmcs.nii.ac.jp/mylab/ | Yusuke Miyao | Associate Professor | Master's or Ph.D Student | 3 | 6 months | Fundamental knowledge about one of the following areas is required: 1. vision processing techniques (e.g. CNN), or 2. deep learning techniques for text processing (e.g. LSTM) |
| 57 | Text Media | Language technologies to assist human reading/writing | http://www-al.nii.ac.jp | Akiko Aizawa | Professor | Master's or Ph.D students | 3 | 3-6months (6 months is preferable) | |
| 58 | Text Media | Scientific paper mining and recommendation | http://www-al.nii.ac.jp | Akiko Aizawa | Professor | Master's or Ph.D students | 3 | 3-6months (6 months is preferable) | |
| 59 | Signal Processing | Graph-based Image Restoration & Processing | http://research.nii.ac.jp/~cheung/intern. html | Gene Cheung | Associate Professor | Master's or PhD students | 3 | 3 months minimum | knowledge in low-level image processing and a strong background in mathematics (linear algebra, combinatorial & convex optimization) |
| 60 | Speech information processing | Controllable, flexible, and enjoyable speech synthesizer for audiobook | http://researchmap.jp/read0205283/?lan g=english | Junichi Yamagishi | Associate Professor | PhD students | 5 | 2-6 months | The successful candidate should be a PhD student in speech processing, computer science, engineering, linguistics, mathematics, or a related discipline. He or she should have strong programming skills and experience with statistical parametric speech synthesis. • Familiarity with software tools including HTK, HTS, SPTK, and Festival is preferable |
| 61 | Speech information processing | Speaker recognition and countermeasures for spoofing | http://www.signalprocessingsociety.org/ technical-committees/list/sl-tc/spl- nl/2013-05/spoofing | Junichi Yamagishi | Associate Professor | PhD students | 5 | 2-6 months | The successful candidate should be a PhD student in speech processing, computer science, engineering, linguistics, mathematics, or a related discipline. He or she should have strong programming skills. |

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|-----|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-----------------------|-------------------------|----------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 62 | Speech information processing | DNN-based speech synthesis (signal processing, acoustic modeling and text analysis) | | Junichi Yamagishi | Associate Professor | PhD students | 5 | 2-6 months | The successful candidate should be a PhD student in speech processing, computer science, engineering, linguistics, mathematics, or a related discipline. He or she should have strong programming skills and experience with statistical parametric speech synthesis and deep learning. • Familiarity with software tools including HTK, HTS, SPTK, and Festival is preferable |
| 63 | Speech information processing | Spoken dialogue system | http://www.udialogue.org | Junichi Yamagishi | Associate Professor | PhD students | 5 | 2-6 months | The successful candidate should be a PhD student in speech processing, computer science, engineering, linguistics, mathematics, or a related discipline. He or she should have strong programming skills. Familiarity with software tools including MMDAgent is preferable |
| 64 | Speech information processing | Voice transformation (Parameterization and models, new applications/frameworks using voice transformation and speech synthesis seemlessly) | | Junichi Yamagishi | Associate Professor | Master's or Ph.D students | 5 | 2-6 months | The successful candidate should be a PhD student in speech processing, computer science, engineering, linguistics, mathematics, or a related discipline. He or she should have strong programming skills and experience with speech synthesis or voice conversion. |
| 65 | Computer Vision and Computer Graphics | Computational Photography: Image-based rendering, Image processing, Color analysis, Spectral imaging | http://research.nii.ac.jp/~imarik | Imari Sato | Professor | Master's or Ph.D students | 3 | 5-6 months | A basic knowledge of computer graphics and good programming skills are required |
| 66 | Deep Learning | Digital Dynamic Map: Scene understanding with drone-derived data | research.nii.ac.jp/~prendinger/ (see"Projects") | Helmut Prendinger | Professor | Master's or PhD students | 15 | 4-6 months | Solid programming skills, e.g., C++ and Python. Solid background in machine learning. Longer stay (6 months) is preferred for good result and possibly a publication. |
| 67 | Deep Learning | Digital Dynamic Map: Object tracking framework for real-world applications using drones (Unmanned Aerial Vehicles) | research.nii.ac.jp/~prendinger/ (see"Projects") | Helmut Prendinger | Professor | Master's or PhD students | 15 | 4-6 months | Solid programming skills, e.g., C++ and Python. Solid background in machine learning. Longer stay (6 months) is preferred for good result and possibly a publication. |

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|----|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------|-------------------------|----------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 68 | Human-Machine Interaction | Creation of an intelligent user interface for unmanned aerial vehicles (UAVs) | research.nii.ac.jp/~prendinger/ (see"Projects") | Helmut Prendinger | Professor | Master's or PhD students | 15 | 4-6 months | Solid programming skills (object-oriented programming), design patterns, XML, Google maps. Longer stay (6 months) is preferred for good result and possibly a publication. |
| 69 | Optimization | Implementation of an automated task allocation method (e.g. Distributed Contraint Optimization) to allocate UAVs to targets in a dynamic environment | research.nii.ac.jp/~prendinger/ (see"Projects") | Helmut Prendinger | Professor | Master's or PhD students | 15 | 4-6 months | Solid programming skills. Background in optimization is helpful; good work is done by the group of Nick Jennings. Longer stay (6 months) is preferred for good result and possibly a publication |
| 70 | Data-Driven Prognostics | Analysis of health monitoring signals of machines to predict optimal time of next maintenance visit | research.nii.ac.jp/~prendinger/ (see"Projects") | Helmut Prendinger | Professor | Master's or PhD students | 15 | 4-6 months | Background in statistics and machine learning methods is helpful. Longer stay (6 months) is preferred for good result and possibly a publication |
| 71 | Sentiment Recognition from Text | Recognition of sentiment using machine learning techniques | research.nii.ac.jp/~prendinger/ (see"Projects") | Helmut Prendinger | Professor | Master's or PhD students | 15 | 2-6 months | Solid programming skills. Background in statistics and machine learning methods is helpful |
| 72 | Service-Oriented Computing, Software Engineering | Mechanisms for Trustworthy and Smart Service- based Systems | http://research.nii.ac.jp/~f- ishikawa/internships/ | Fuyuki Ishikawa | Associate Professor | Master's or PhD students | 4 | 2-6months | |
| 73 | Software Engineering (Forma Methods, Testing) | Interactive Example Generator Tool | http://research.nii.ac.jp/~f- ishikawa/internships/ | Fuyuki Ishikawa | Associate Professor | Master's or PhD students | 4 | 2-6months | |
| 74 | Software Engineering (Forma Methods) | Tool Set for Refinement Engineering | http://research.nii.ac.jp/~f- ishikawa/internships/ | Fuyuki Ishikawa | Associate Professor | Master's or PhD students | 4 | 2-6months | |

| No. | Research area | Title of the research | Website | Name of supervisor | Title of the supervisor | Requirements for applicants: Master's / Ph.D. Student | Total number of acceptance per supervisor | Duration : 2-6months (less than 180days) | Comments |
|-----|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------|-------------------------|----------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 75 | Multimedia Data Mining and Services | People activities analytics in the context of social online presences and real physical behaviors in multimedia landscape (e.g., visualizing geo-social activities, context-aware video soundtrack recommendation, enhancing online education especially for MOOC environments by leveraging multimedia | http://research.nii.ac.jp/~yiyu/ | Yi Yu | Assitant professor | Master's or PhD students | 4 | 3-6months | |
| 76 | Music Information Retrieval and Its Applications | Music discovery (e.g., content-based music retrieval and playlisting, personalized music recommendation), and music-based healthcare and wellbeing (e.g., applying various musical technologies in improving wellness and handling daily stress and anxiety) | http://research.nii.ac.jp/~yiyu/ | Yi Yu | Assitant professor | Master's or PhD students | 4 | 3-6months | |
| 77 | Geometric Computer Vision | 3D Reconstruction for Large-Scale Image Collections; 3D Human Scan Using Mobile Devices ((structure-from-motion, pose estimation, minimal problems, et al.) | http://researchmap.jp/yinqiangzheng | Yinqiang Zheng | Assistant Professor | Master's or PhD students | 4 | 3-6 months | Students with strong mathematical and programming skills are preferred. We are aiming at publications in top venues only. |
| 78 | Photometric Computer Vision | Hyperspectral/Multispectral Image Capture/Denoising/Analysis (illumination and reflectance analysis, intrinsic image, specularity, shadow, fluorescence, et al.) | http://researchmap.jp/yinqiangzheng | Yinqiang Zheng | Assistant Professor | Master's or PhD students | 4 | 3-6 months | Students with strong mathematical and programming skills are preferred. We are aiming at publications in top venues only. |
| 79 | Security | Fundamental techniques and systems for content security | http://research.nii.ac.jp/~iechizen/officia l/research-e.html | Isao Echizen | Professor | Master's or PhD students | 3 | 3-6months | |
| 80 | Privacy | Privacy-enhancing technologies for resolving trade-offs between data anonymity and utility | http://research.nii.ac.jp/~iechizen/officia l/research-e.html | Isao Echizen | Professor | Master's or PhD students | 3 | 3-6months | |
| 81 | Bioimage Informatics | Bioimage analysis and machine learning for mouse phenotyping and zebrafish neural activity analysis | http://agora.ex.nii.ac.jp/~kitamoto/educ ation/internship/ | Asanobu Kitamoto | Associate Professor | Master's or PhD students | 4 | 3-6 months | Programming skill is required. An interdisciplinary topic needs working with domain experts. |
| 82 | Crisis Informatics | Big data analytics (esp. image processing, natural language processing, and machine learning) for natural disasters and crisis | http://agora.ex.nii.ac.jp/~kitamoto/educ ation/internship/ | Asanobu Kitamoto | Associate Professor | Master's or PhD students | 4 | 3-6 months | Programming skill is required. An interdisciplinary topic needs working with domain experts. |

| No. | Research area | Title of the research | Website | Name of supervisor | Title of the supervisor | Requirements for applicants: Master's / Ph.D. Student | Total number of acceptance per supervisor | Duration : 2-6months (less than 180days) | Comments |
|------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------|-------------------------|----------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------|
| 83 | Earth Environmental Informatics | Big data analytics (esp. image processing and machine learning) for solving environmental problems | http://agora.ex.nii.ac.jp/~kitamoto/educ ation/internship/ | Asanobu Kitamoto | Associate Professor | Master's or PhD students | 4 | 3-6 months | Programming skill is required. An interdisciplinary topic needs working with domain experts. |
| 84 | Digital Humanities | Geographic information systems (GIS), Semantic Web, face recognition, and 3D CG modeling for cultural heritage and museums | http://agora.ex.nii.ac.jp/~kitamoto/educ ation/internship/ | Asanobu Kitamoto | Associate Professor | Master's or PhD students | 4 | 3-6 months | Programming skill is required. An interdisciplinary topic needs working with domain experts. |
| 85 | Big data/Iot Mindflow project | t Human Stress Ontology | http://research.nii.ac.jp/~andres/official/ intern2016_10.html | Frederic Andres | Associate Professor | Master's or PhD students | 3 | 90days | fields of study: Linguistic or Human stress area |
| 86 | Mindflow project | MindFlow reflection | http://research.nii.ac.jp/~andres/official/ intern2016_11.html | Frederic Andres | Associate Professor | Master's or PhD students | 3 | 90days | fields of study: Web service/interface/data collection |
| 87 | Agriculture | Personal Obervation Collector (MyPOC) | http://research.nii.ac.jp/~andres/official/ intern2016_2.html | Frederic Andres | Associate Professor | Master's or PhD students | 3 | 90 days or 180 days | fields of study: Web service in mobile/sensors |
| 88 | pedagical and didactical e- learning | Web-based E-Learning System in Moodle environment | http://research.nii.ac.jp/~andres/official/ intern2016_3.html | Frederic Andres | Associate Professor | Master's or PhD students | 3 | 90 days or 180 days | fields of expertise: Web service/moodle/moodle plugins |
| 89 | pedagical and didactical e- learning | WebELS Apps for e-learning mobile environment | http://research.nii.ac.jp/~andres/official/ intern2016_4.html | Frederic Andres | Associate Professor | Master's or PhD students | 3 | 90 days | fields of expertise: Web service/HTML apps development |
| 4. N | Aanagement and Outside | Collaboration on R&D | | 1 | 1 | 1 1 | | 1 | |
| 90 | Databases / Data Mining | Similarity Search and Intrinsic Dimensionality | http://zephyr.nii.ac.jp/houlelab/downloa ds/proj-simsearch.pdf | Michael Houle | Visiting Professor | Master's or PhD students | 6 | 3-6 months | Priority given to PhD students, and for internships of 5-6 months. |
| 91 | Data Mining | Outlier Detection and Data Dimensionality | http://zephyr.nii.ac.jp/houlelab/downloa ds/proj-outlier.pdf | Michael Houle | Visiting Professor | Master's or PhD students | 6 | 3-6 months | Priority given to PhD students, and for internships of 5-6 months. |
| 92 | Data Mining | Clustering and Data Dimensionality | http://zephyr.nii.ac.jp/houlelab/downloa ds/proj-clust.pdf | Michael Houle | Visiting Professor | Master's or PhD students | 6 | 3-6 months | Priority given to PhD students, and for internships of 5-6 months. |

| No. | Research area | Title of the research | Website | Name of supervisor | Title of the supervisor | Requirements for applicants: Master's / Ph.D. Student | Total number of acceptance per supervisor | Duration : 2-6months (less than 180days) | Comments |
|-------------|--------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------|-------------------------|----------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------------------|
| 93 | Data Mining / Machine Learning | Unsupervised Feature Selection | http://zephyr.nii.ac.jp/houlelab/downloa ds/proj-features.pdf | Michael Houle | Visiting Professor | Master's or PhD students | 6 | 3-6 months | Priority given to PhD students, and for internships of 5-6 months. |
| 94 | Data Mining / Machine Learning | KNN Classification and Applications | http://zephyr.nii.ac.jp/houlelab/downloa ds/proj-classification.pdf | Michael Houle | Visiting Professor | Master's or PhD students | 6 | 3-6 months | Priority given to PhD students, and for internships of 5-6 months. |
| 95 | Theory (Algorithmics, Statistics, Machine Learning) | Theory of Intrinsic Dimensionality | http://zephyr.nii.ac.jp/houlelab/downloa ds/proj-id-theory.pdf | Michael Houle | Visiting Professor | Master's or PhD students | 6 | 3-6 months | Priority given to PhD students, and for internships of 5-6 months. |
| 1. P | rinciples of Informatics Re | esearch Division | | | | | | | |
| 96 | Sublinear-time algorithms | Testing algebraic properties of graphs and testing properties of algebraic objects | http://research.nii.ac.jp/~yyoshida/ | Yuichi Yoshida | Associate Professor | PhD. Students | | up to 3 months | |