

**2009 Second ISECS International Colloquium on Computing,  
Communication, Control, and Management (CCCM 2009)**

**August 8-9, 2009, Sanya, China**

**Landscape Beach Hotel**

**<http://www.iita-conference.org/cccm09/>**



## **Conference Program Guide**

### **Co-Sponsors**

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**Wuhan Institute of Technology, China**

**Yangzhou University, China**

**Guangdong University of Business Studies, China**

**Springer, Lecture Notes in Electrical Engineering**

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## August 8, Morning

08: 30 - 08: 50	<b>Open Ceremony</b>	三亚丽景海湾酒店 Landscape Beach Hotel Main Conference Room
08: 50 - 09: 10	<b>Photo</b>	
09: 10 - 10: 00	<b>Keynote Speech 1</b> <b>Speaker:</b> Prof. Ning Zhong, Head of Knowledge Information Systems Laboratory Department of Life Science and Informatics Maebashi Institute of Technology, Japan	
10: 00 - 10: 50	<b>Keynote Speech 2</b> <b>Speaker:</b> Chin-Chen Chang ( Taiwan ), Professor, IEEE and IET Fellow	
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12: 00- 12: 50	<b>Keynote Speech 4</b> <b>Speaker:</b> Prof. Bin Wang, Central China Normal University, China	

13: 00-14: 00	<b>Buffet Lunch</b>	三亚丽景海湾酒店 Landscape Beach Hotel
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14: 00 - 16: 10	<b>Oral Session 1: Computing 1</b> <b>Chair: Yuehai Wang and Ben Kwang-Mong SIM</b>	三亚丽景海湾酒店 Landscape Beach Hotel Conference Room 1
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## Part II Keynote Speeches

### Keynote Speech 1 : Towards Brain-inspired Web Intelligence and Applications



**Speaker:** Ning Zhong, Department of Life Science and Informatics Maebashi Institute of Technology, Japan and The International WIC Institute Beijing University of Technology, China

<http://www.kis-lab.com/zhong/>.

#### **Abstract:**

Artificial Intelligence (AI) has been mainly studied within the realm of computer based technologies. Various computational models and knowledge based systems have been developed for automated reasoning, learning, and problem-solving. However, there still exist several grand challenges. The AI research has not produced major breakthrough recently due to a lack of understanding of human brains and natural intelligence. In addition, most of the AI models and systems will not work well when dealing with large-scale, dynamically changing, open and distributed information sources at Web scale.

The next major advances in artificial intelligence and Web intelligence are most likely to be brought by an in-depth understanding of human intelligence and its application in the design and implementation of systems with human-level intelligence. To prepare us ready for the great opportunity, this talk outlines a unified framework for the study of brain inspired Web intelligence (WI) and applications by exploring the latest results from brain informatics (BI). This leads to profound advances in the analysis and understanding of data, information, knowledge and wisdom, as well as their inter-relationships, organization and creation process. The fast-evolving WI research and development initiatives are now moving towards understanding the multi-facet nature of intelligence in depth and incorporating it on Web scale. The recently developed instrumentation (fMRI etc.) and advanced IT are causing an impending revolution in WI research and development, making it possible for us to pursue the new frontier of intelligence science and develop human-level Web intelligence.

#### **Biography:**

Ning Zhong received the Ph.D. degree in the Interdisciplinary Course on Advanced Science and Technology from the University of Tokyo. He is currently head of Knowledge Information Systems Laboratory, and a professor in Department of Life Science and Informatics at Maebashi Institute of Technology, Japan. He is also director and an adjunct professor in the International WIC Institute (WICI), Beijing University of

Technology. He has conducted research in the areas of knowledge discovery and data mining, rough sets and granular-soft computing, Web intelligence, intelligent agents, brain informatics, and knowledge information systems, with over 200 journal and conference publications and 20 books. He has been the editor-in-chief of the Web Intelligence and Agent Systems journal (IOS Press), associate editor of IEEE Transactions on Knowledge and Data Engineering (2003-2008), and Knowledge and Information Systems journal (Springer), a member of the editorial board of Transactions on Rough Sets and International Journal of Cognitive Informatics and Natural Intelligence. He has been a member of the editorial board of Advanced Information and Knowledge Processing (AI&KP) book series (Springer), Frontiers in AI and Applications book series (IOS Press), Chapman&Hall/CRC Data Mining and Knowledge Discovery book series, and editor (the area of intelligent systems) of the Encyclopedia of Computer Science and Engineering (Wiley).

He has also been co-chair of Web Intelligence Consortium (WIC), chair of the IEEE Computer Society Technical Committee on Intelligent Informatics (TCII), chair of IEEE Computational Intelligence Society Task Force on Brain Informatics (TF-BI), member of the steering committee of IEEE International Conferences on Data Mining (ICDM) (2000-2008), vice chair of IEEE Computational Intelligence Society Technical Committee on Granular Computing, the steering committee of International Rough Set Society. He has served or is currently serving on the program committees of over 100 international conferences and workshops, including IEEE ICDM'02 (conference chair), IEEE ICDM'06 (program chair), IEEE/WIC WI-IAT'03 (conference chair), IEEE/WIC/ACM WI-IAT'04 (program chair), and IJCAI'03 (advisory committee member). He was awarded the best paper awards of AMT'06, JSAI'03, IEEE TCCI/ICDM Outstanding Service Award in 2004, and Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD) Most Influential Paper Award (1999-2008).

## **Keynote Speech 2: A Steganographic Scheme for Reversible Information Hiding with Good Visual Quality Suitable for Small Embedded Data**



**Speaker: Prof. Chin-Chen Chang (Taiwan), Professor, IEEE and IET Fellow  
Department of Information Engineering and Computer Science  
Feng Chia University**

**<http://www.cs.ccu.edu.tw/~ccc/>**

**Research Fields: Database Design, E-Business Security,  
Electronic Imaging Techniques, and Computer Cryptography**

### **Abstract:**

In this speech, he proposes a simple reversible data hiding method in spatial domain for digital images by exploiting the correlation characteristic of neighboring pixels in natural images. The proposed method embeds several secret bits into a block of two consecutive cover pixels whose values are equal. The experimental results show that the proposed method achieves very good visual quality at low hiding capacity in comparison with Tian's and Ni et al.'s methods.

### **Biography:**

Professor C.C. Chang was born in Taichung, Taiwan on Nov. 12th, 1954. He obtained his Ph.D. degree in computer engineering from National Chiao Tung University. He's first degree is Bachelor of Science in Applied Mathematics and master degree is Master of Science in computer and decision sciences. Both were awarded in National Tsing Hua University. Dr. Chang served in National Chung Cheng University from 1989 to 2005. His current title is Chair Professor in Department of Information Engineering and Computer Science, Feng Chia University, from Feb. 2005. Prior to joining Feng Chia University, Professor Chang was an associate professor in Chiao Tung University, professor in National Chung Hsing University, chair professor in National Chung Cheng University. He had also been Visiting Researcher and Visiting Scientist to Tokyo University and Kyoto University, Japan. During his service in Chung Cheng, Professor Chang served as Chairman of the Institute of Computer Science and Information Engineering, Dean of College of Engineering, Provost and then Acting President of Chung Cheng University and Director of Advisory Office in Ministry of Education, Taiwan.

Professor Chang's specialties include, but not limited to, data engineering, database systems, and computer cryptography and information security. A researcher of acclaimed and distinguished services and contributions to his country and advancing human knowledge in the field of information science, Professor

Chang has won many research awards and honorary positions by and in prestigious organizations both nationally and internationally. He is currently a Fellow of IEEE and a Fellow of IEE, UK. And since his early years of career development, he consecutively won Outstanding Youth Award of the R. O. C., Outstanding Talent in Information Sciences of the R. O. C., AceR Dragon Award of the Ten Most Outstanding Talents, Outstanding Scholar Award of the R. O. C., Outstanding Engineering Professor Award of the R. O. C., Chung-Shan Academic Publication Awards, Distinguished Research Awards of National Science Council of the R. O. C., Outstanding Scholarly Contribution Award of the International Institute for Advanced Studies in Systems Research and Cybernetics, Top Fifteen Scholars in Systems and Software Engineering of the Journal of Systems and Software, and so on. On numerous occasions, he was invited to serve as Visiting Professor, Chair Professor, Honorary Professor, Honorary Director, Honorary Chairman, Distinguished Alumnus, Distinguished Researcher, Research Fellow by universities and research institutes. He also published over 990 papers in Information Sciences. In the meantime, he participates actively in international academic organizations and performs advisory work to government agencies and academic organizations.

### **Keynote Speech 3: Agent-based Cloud/Grid Computing: Issues and New Directions.**



**Speaker: Professor Ben Kwang-Mong SIM,  
Associate Editor, IEEE Transactions on SMC, Part C, IEEE SMC Society.  
Guest Editor-in-Chief, IEEE Systems Journal, IEEE Systems Council.  
Director, Multiagent Systems Laboratory,  
Gwangju Institute of Science and Technology, South Korea**

#### **Abstract:**

Agent-based Cloud/Grid computing (in particular, agent-based Cloud/Grid resource management) is concerned with the design and development of software agents (automatic scheduling programs) for bolstering the discovery, scheduling, management, and (co-)allocation of computing resources in a computational Cloud/Grid. Research in agent-based Cloud/Grid computing deals with the design and application of agent-based interactions (cooperation, coordination, and negotiation) protocols to facilitate and automate the management, scheduling, monitoring, and control of tasks and resources in computational Clouds/Grids. This keynote lecture identifies some of the issues in Cloud/Grid resource management, summarizes some of the state-of-the-art agent-based architectures for Cloud/Grid resource management, and suggests new directions in agent-based Cloud/Grid computing.

#### **Biography:**

Benjamin Kwang-Mong Sim has extensive experience serving as Editor and Guest Editor of many international journals. He has been an Associate Editor of the IEEE Transactions on Systems, Man, and Cybernetics, Part C since 2003. He is also the Guest-Editor-in-Chief of the special issue on Grid Resource Management in the IEEE Systems Journal, the official journal of the IEEE Systems Council (formed by 15 IEEE Societies). In addition, he serves as an Associate Editor of the International Journal of Applied Systemic Studies, an Editorial board member of the International Journal of Hybrid Intelligent Systems, and an Editorial Advisory Board Member of The Open Cybernetics and Systemics Journal, The Open Software Engineering Journal and The System and Information Sciences Notes.

He is the sole Guest Editor/Lead Guest Editor of five special journal issues on Grid computing and automated negotiation. As the sole Guest Editor, he single-handedly managed and coordinated the review processes for four special journal issues on (i) Grid Resource Management (IEEE Systems Journal), (ii) game-theoretic analysis and stochastic simulation of negotiation agents (IEEE Transactions on SMC), (iii) learning approaches for negotiation agents (International Journal of Intelligent Systems (Wiley)), and (iv) Agent-based

Grid Computing (Applied Intelligence Journal (Springer)). He is also the Lead Editor of a special issue on negotiation and scheduling mechanisms in the Multiagent and Grid Systems Journal (IOS Press).

He has contributed actively to the fields of automated negotiation, multiagent systems, and agent-based Grid computing. He founded the Agent-based Grid Computing and Automated Negotiation Group, which has expanded both in its scale and its scope to become the Multiagent Systems Laboratory at the Gwangju Institute of Science and Technology, South Korea. In addition to attracting many research grants, he has contributed many survey papers (including a frequently-cited survey paper in IEEE Transactions), many technical papers in IEEE Transactions, journal guest editorials, award-winning conference papers, as well as position papers in agent-based Grid computing and automated negotiation.

He is a referee for many national research grant councils, including the National Science Foundation, USA, and has served as external tenure and promotion reviewer for a preeminent research university in USA. He is a senior member of IEEE and the IEEE SMC Society, and a TC Member of the IEEE SMC Society's Technical Committee on Distributed Intelligent Systems. He is also a referee for Routledge Economics Book Series on Game Theory (Taylor & Francis), and has served as keynote speaker, program vice-chair, panel speaker, session chair, and PC member for many international conferences.

## **Keynote Speech 4: An investigation of Chinese professional athletic coaches' perceptions on the relationships between working related pressures and satisfaction of family life**



**Dr. Bin Wang, Professor and Associate Dean, School of Physical Education and Sport, Central China Normal University, Wuhan, Hubei, China,**

### **Abstract:**

Based on the study of Greenhaus & Beutell (1985), the definition of work-family conflict (WFC) was investigated. The role conflicts between long working hours and family life satisfaction are incompatible for many coaches, especially for those coaches who work long hours in the evenings and weekends (Sagas & Cunningham, 2005). In order to help Chinese professional athletic coaches to better cope with WFC, some institutions introduce certain family-friendly policies and practices in workplace in hopes to reduce job related pressures for coaches. The purpose of this study is to examine the effects of family-friendly supporting system on the relationship of coaches' perceptions between working pressures and family life satisfaction. The data of the survey were collected from the 5 cities in China with 192 married coaches investigated. These coaches trained 25 different sports such as basketball, volleyball, tennis, shooting, diving, swimming, track and field, wrestling, kickboxing, art gymnastic, etc. The result of the study revealed that for those coaches who perceived high level of family-supportive supervision, no significant relationships were found between the working related pressure and the family life satisfaction, and the negative relationships were revealed between working pressures and family life satisfaction. The presentation will also introduce the practical implications of how these research findings can positively contribute to Chinese professional athletic coaches' proper coping strategies between job related pressures and family life.

### **Biography:**

Dr. Bin Wang is a Professor and Associate Dean in School of Physical Education and Sports, Central China Normal University in P.R. of China. He earned his Ph.D. in Applied Psychology from Beijing Sports University in P.R. of China. Dr. Wang' research interest is in the areas of sport psychology and sports administration. Mainly, he investigates Chinese professional athletic coaches' job related pressures in relationship to coaches' family life. Dr. Wang's research has been supported by the National Natural Science Foundation of China, China Ministry of Education, China Sport General Administration and Chinese postdoctoral science foundation. He has published over 50 papers in a variety of professional journals and Dr. Wang has made numbers presentations at conferences, including the International Congress of Psychology, Chinese Psychological of Society, China Sport Science Society, and Asian & South Pacifica Association Sports Psychology. Currently, Dr. Wang is a Committee Member of Sports Psychology, Chinese Society of Sports Science, Director of Hubei Society of Psychology and Vice-President of Sports Psychology Committee in P.R of China.

## Part III Oral Session

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**Chairs: Peng Ching Huai and Bo Yan**

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An Improved (t,n) Threshold Proxy Signature Scheme Based on RSA Cryptosystem  
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An New Approach to Access VANETs  
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A Security framework for Wireless Network based on Public Key Infrastructure

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Bo Yan, Bo Du ICCSNA 64(203)

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Improved Group-key-management Scheme for WSN

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Atmosphere–Ocean Laser Communication Channel Simulation and Modeling

Yan Dong, Xue Qingji ICCSNA 204

ScudADL: An Architecture Description Language for Adaptive Middleware in Ubiquitous Computing Environments

Qing Wu, YingLi ICCSNA 222

# **Part IV Instructions for Presentations**

## **Oral Presentation**

### **Devices Provided by the Conference Organizer:**

Laptops (with MS-Office & Adobe Reader)

Projectors & Screen

Laser Sticks

### **Materials Provided by the Presenters:**

PowerPoint or PDF files

Duration of each Presentation (Tentatively):

Regular Oral Session: about 15 Minutes of Presentation, 5 Minutes of Q&A

Keynote Speech: 40 Minutes of Presentation, 10 Minutes of Q&A

# Part V Hotel Information

三亚丽景海湾酒店欢迎您！

三亚丽景海湾酒店位于三亚大东海旅游风景区，隶属湖北鸿信资产管理有限责任公司，是一家国际四星级的热带滨海休闲度假型酒店。

酒店背山面海，距沙滩步行仅需三十八秒，整体建筑高低错落、造型别致，与青山、碧海、蓝天和谐统一，浑然一体；采用开放式大堂，蓝蓝的大海近在咫尺，伸手可触；共有风格各异、舒适典雅的海景、山景房二百零八间(套)，每间客房均有宽带网接口、独立观景阳台和超大落地窗。

富丽堂皇的中餐厅提供潮粤、湖北菜系、海南风味，港式推车早茶及海鲜等特色菜系；金色池塘西餐厅提供地中海风味的各类西式美点，自助早餐，巴西烧烤，让您在欣赏海边美景的同时品尝各式美食。

三亚丽景海湾酒店将是您在三亚休闲度假或举办会议的最佳选择，这里风光秀丽、环境优美，置身其间，可看青山满目葱翠，眺碧海烟波浩淼，听海浪涛声，观万人戏水场景，让您在三亚旅游温馨浪漫、心旷神怡、流连忘返。



## 1、酒店房型及优惠价格：

房型	房间数	门市价	平时价	周末价
高级丽景双/大床房	12 间	1380 元	380 元	
豪华丽景双/大床房	32 间	1480 元	410 元	
豪华园景双床房	30 间	1580 元	450 元	
高级海景双标	8 间	1980 元	550 元	610 元
豪华海景双标	36 间	2080 元	610 元	670 元
超级海景大床	18 间	2380 元	670 元	730 元

备注：

- ◆ 以上优惠价格均含西式自助早餐（最多两人），另收 9 元/人/晚的政府调节基金。
- ◆ 房间免费提供宽带上网，自带电脑即可。
- ◆ 酒店附属项目：山地车、健身器材、桌球、棋牌室、游泳池、沙滩排球、沙滩足球等。

2、酒店联系方式：

电话：0898-88228742

传真：0898-88228566

网址：<http://www.sanyaliking.com>

3、酒店周边及主要景点介绍：

- ◆ 机场：从三亚凤凰机场打出租车到达酒店约 25 分钟，费用在 50 元以内。
- ◆ 大东海旅游风景区：三亚唯一不收门票的天然旅游风景区，从酒店步行至沙滩边仅需 38 秒。
- ◆ 南山佛教文化苑：距离酒店 48 公里，南山佛教文化园是一座展示中国佛教传统文化，富有深刻哲理寓意，能够启迪心智、教化人生的园区。其主要建筑有南山寺、南海观音佛像、观音文化苑、天竺圣迹、佛名胜景观苑、十方塔林与归根园、佛教文化交流中心、素斋购物一条街等。
- ◆ 天涯海角风景游览区：距离酒店 25 公里，该景区主要是由热带海滩花岗岩风景区、购物区和度假

村组成，集成热带海洋风光，历史遗迹，中华民俗文化为一体的旅游风景区。

◆ 南海情山鹿回头公园：距离酒店 2 公里，公园三面环海，一面毗邻三亚市区，是登高望海和观看日出日落的制高点，也是俯瞰三亚市全景的唯一佳处。

Sanya Landscape Beach Hotel, located in Dadonghai Tourist Attraction and affiliated to Hubei Hongxin Asset Management Co, Ltd, is an international four star tropical beach resort.

Its face toward the sea and back to the mountains, only 38 seconds walk to the beach. All the buildings of the hotel vary in height and are built in graceful disorder and with unique design, and are compatible with the green mountains, blue sea and blue sky, forming one integrated mass. By owning an open lobby, the hotel is so near to the blue sea which can be reached very easily; 208 guestrooms are designed with comfort and different style, with sea view or mountain view, and all rooms are equipped with ADSL Internet Connection, independent balcony and super large French window.

Sanya Landscape Beach Hotel will be your best choice for having a holiday or holding a meeting in Sanya. It is with graceful Landscape and elegant environment. When being in the hotel, you can see the green mountains, overlook the blue sea, listen to the sound of waves, watch the scene of thousands of people playing in the sea, making your holiday in Sanya full of warmth, romance and comfort and you will forget to return.



### 1、 Guest Room

Room Type	Num.	Rack rate	Discounted rate	Weekend rate
Superior landscape room	12	RMB1380	RMB380	
Deluxe landscape room	32	RMB1480	RMB410	
Deluxe garden room	30	RMB1580	RMB450	
Superior sea-view room	8	RMB1980	RMB550	RMB610
Deluxe sea-view room	36	RMB2080	RMB610	RMB670
Super sea-view double room	18	RMB2380	RMB670	RMB730

### Remarks:

- ◆ The rate above is included 2adults breakfast.
- ◆ Add 9yuan per person per night extra.
- ◆ Hotel facility:bicycle,billiards,GYM,chess room,swimming pool,etc

### 2、 Contact:

Tel:0898-88228742

Fax:0898-88228566

Web: <http://www.sanyaliking.com>

### 3、 How to get to the hotel:

From the Sanya airport, you can take a taxi at most 50yuan.

We are looking forward to your coming!

Landscape beach hotel

## **Part VI Contact Us**

CCCM 2009, ACC 2009, ICCSNA 2009 Organizing Committee

E-mail: [cccm2009@gmail.com](mailto:cccm2009@gmail.com)

Tel: +86- 027- 62114455

# Part VII Travel Information

## 亚龙湾

### 亚龙湾国家度假旅游区

位于三亚市区以东 30 公里的亚龙湾，总面积 18.6 平方公里。三面青山相拥，一面呈月牙型向大海敞开。沙滩缓宽阔，绵延 7 公里多，浅海区宽达 50—60 米。沙粒洁白细软，海水清澈澄透，年平均水温在 25℃ 以上，常年可以进行海水浴、日光浴、沙滩活动、潜水和多种水上运动。海水能见度达 20 米以上，海湾近 10 公里长，沙滩好似一条环绕海湾的白色玉带，湾内风平浪静，海水湛蓝。享有“天下第一湾”之美誉，“不是夏威夷，胜似夏威夷。”

锦母角、亚龙角水深流急，激浪拍崖，怪石嶙峋，是进行攀崖活动的好场所；海面上星罗棋布的岛、礁是海上运动爱好者的天堂；海底的珊瑚礁、热带鱼、野生动植物构成的极富梦幻色彩的海底世界，是最佳的潜水胜地；还有珍稀树种“红树林”、“龙血树”和发育良好的热带自然植物，让您大开眼界。

亚龙湾现已建成具有休闲度假、特色观光、文体娱乐及会议展览等多功能、全方位的综合性旅游胜地。区内建成的多种风格各异的高品位度假酒店，为您的度假生活倍增浪漫和情趣。亚龙湾在旅游服务与国际化接轨的同时，更富有东方色彩，具有独一无二的亚龙湾风格。

亚龙湾国家级旅游度假区被《国家地理杂志》评为“中国最美八大湾之一”

### 亚龙湾蝴蝶谷

蝴蝶谷是国家 4A 级旅游景区，蝴蝶谷位于亚龙湾小龙潭湖后部，两面环山，中间谷底贯穿一条溪流。谷内小桥流水，景色怡人，自然生长着千上万只蝴蝶。谷内随处可见色彩艳丽的彩蝶在绿树繁花间翩翩起舞。在这里你可以感觉到大自然的无穷魅力。

### 龙虎园

“濒危野生动植物繁殖研究中心（龙虎园）”位于三亚市田独镇榆红村以西，占地面积 400 余亩。

“龙虎园”到目前为止，已接待了 300 多位贵宾，其中重要客人有：原中央政治局常委、纪委书记尉健行，原中央军委副主席迟浩田上将，胡锦涛总书记夫人刘永清，原中央军委总政治部主任于永波上将，农业部长杜青林，广州军区政委刘书田上将，世界小姐组织主席莫利夫人及第 52 届世界小姐阿金和世界先生瑞内蒂，泰国国会上议院、下议院代表团等。

### 亚龙湾海底世界

经国务院、国家海洋局和海南省政府、省海洋厅批准，中国寰岛集团在三亚亚龙湾附近海域约 9 平方公里的范围内投资建设珊瑚礁资源保护、发展和综合管理示范区，并进行适度旅游开发，该示范区将建成以海底世界游览为主体的集海上娱乐城、休闲度假村于一体大型海洋旅游观光区。

在这 9 平方公里的珊瑚礁保护区内，在蔚蓝、透明、清澈的海水里，生活着世界上保护最完整的、种类繁多的硬珊瑚和软珊瑚，还有摇曳多姿的藻类植物，追来逐去的庞大大鱼群，海蛇、海胆、海星。

亚龙湾海底世界已建成包括海底世界半潜观光、美人礁水肺潜水、海底漫步、深海潜水摩托、香蕉船、拖曳伞、徒手潜水、玻璃观光船、快艇观光、摩托艇、冲浪飞车、沙滩摩托车、沙滩浴场等娱乐项目，还有与之配套的海底世界沙滩酒店，让您领略到海洋旅游的无限乐趣。

## 三亚湾

### 椰梦长廊

椰梦长廊是环三亚湾修建的一条著名的海滨风景大道，有“亚洲第一大道”之称。它长 20 公里临海一侧为景观优美迷人的热带植物园林，与银色的沙滩、蓝色的大海相映成趣，组合成一幅色彩斑斓的长卷画图；另一侧是魅力四射的休闲度假区，布局巧妙，风格各异的幢幢别墅、座座宾馆等园林式现代建筑处处林立。椰梦长廊营造了优美的生态环境和最佳的休闲度假环境，是三亚市旅游精品的典范。

### 海月广场

海月广场是三亚湾离海最近的广场，广场上创意和摇曳多姿的柳叶雕塑，美丽的三亚湾，以及以大海中的明月为构思的水池，吸引了广大市民和游人的目光。

## 大东海

大东海湾位于三亚市区东南部，离市区 3 公里。位于兔子尾和鹿回头两山之间，海湾全长 2.1 公里，是三亚最早被开发，最具规模的热带滨海度假区。

### 小东海湾风景游览区

小东海湾，三亚新兴的旅游休闲胜地。距三亚市区约 4 公里，位于鹿回头开发区。该海域是经国务院批准的三亚国家级自然保护区之一。根据近几年的监测，该海域的水质为一类海水水质，各种海洋生物有 600 多种。海底美丽丰富的珊瑚族群和热带鱼令您赏心悦目，洁白细软的海滩，古朴的木质建筑，浓郁的休闲气息，让您领略纯自然的热带滨海风情。区内经营水肺潜水、海底漫步、夜潜、玻璃观光船、半潜艇、拖曳伞、深海垂钓、水下摄像及沙滩休闲等各类海洋娱乐活动。

### 鹿回头风情园

如果您要去鹿回头公园千万别忘了去风情园看看。鹿回头风情园是一个以民俗风情和爱情传说为主题的公园。是一个自然风光和人造景观完美结合的景区。

风情园位于鹿回头岭脚下，汽车驶过弯弯曲曲的山路、穿过原始的小渔村——鹿回头村就到风情园的大门了。门前是铺着石板的小广场，石板间生长的小草与几棵椰子树把广场与景区协调的搭配在一起。当然此刻的你也许会迫不及待的走入景区，但不要忘了买门票哟！走进大门就是一座 8 米多高的“相聚鹿回头”雕塑，它向游人解读着鹿回头的神话故事，让人们相聚在一起追求爱的真谛。如果你是一个有心人的话，雕塑四周地面会更让你着迷，因为那 3000 多平方米的地面全是用黎族雕塑筒裙图案的石板铺就，整个黎族服饰文化栩栩跃然于石上。

风情园内的小路铺的都是粗石，路两旁林木茂密，有很多叫不出名字的野热带花卉，左一丛、右一簇地点缀着，似一支不经意的乡音，在幽幽梵唱。走过一处椰林，你就到了仙鹿景区。这是一个园中园，其间设有仙鹿洞、仙鹿山、仙鹿池。设计者构思颇为巧妙，这里水相映、洞洞相通。鹿儿在其间时而登山窜洞，时而池中戏水，出出进进，进隐时现，就这些可爱的小鹿就足以让你留连忘返了。

走出仙鹿园区，映入眼帘的是一块绿地和两棵大榕树，在这里你可以在树下的秋千上悠闲，可以坐在草地上小憩，也可以与草地上的白鸽嬉戏。绿地旁，仙鹿湖像一颗明珠镶嵌在风情园内。它是一个天然湖，大概占地 30 亩。湖畔山石园林点缀，湖而上架设的情人桥是两座由麻绳和木板构建的吊索桥，走在晃悠悠的情人桥上，你的心情肯定更加悠闲。仙鹿湖水面时有鱼儿跃出，好像在欢迎远道而来的客人，如果出神的看着这些游来游去的锦鲤，我相信你肯定会产生置身某江南园林的错觉。黎寨景区是风情园的主景区。一座黎族族的船形屋成了酿酒坊。景区从中部山区请来的黎家酿酒高手在这里为游客表演难得一见的另类酿酒方式。如果尝了他们的“山兰酒”，你也许就明白了什么叫“琼浆玉液”。

文化展馆是一处很独特的展馆。茅草盖的顶与水泥墙在这里得到了完美结合，房顶上两支鹿角独具匠心，给人一种自然的感觉。展馆内摆设的展品也许才是你最感兴趣的，因为你没有时间到海南中部山区去看看的话，在这里也能了解到海南原始民族的生活习俗。各种简单的劳动工具告诉你人们自然生活的状态，色彩鲜艳的织锦告诉你一切美丽还是要双手创造，打柴舞、鼻箫告诉你黎族是一个能歌善舞的民族。而这一切都在诱惑着走进那个原始、纯朴的少数民族世界。

在走完黎族习俗区，你又回到相聚鹿回头的雕塑前。我想当你望着那那徜徉在爱河中的青年男女，肯定也希望自己逃离都市，到类似风情园描述的地方过那种原始的生活

### 三亚扬帆海上钓鱼俱乐部

扬帆海上钓鱼俱乐部拥有多艘三亚目前最快的豪华钓鱼游艇。艇上置有空调、卫生间、垂钓平台等，钓鱼设备俱全，安全、豪华舒适，方便快捷。每年接待了众多的国内外游客和钓鱼爱好者，探明多处优良的钓点。推出：岛屿垂钓、矶钓、远海垂钓、深海精品潜水等海上娱乐项目及海上商务会议、私人集会。俱乐部现有经验丰富的船长和钓鱼辅导员，将带着您到鱼多景美的海域，体验南海垂钓的乐趣。

## 市区

### 南天生态大观园

南天生态大观园是由海南省三亚市天行旅游实业有限公司投资兴建,园区规划总面积 171.68 公顷,位于我国最南端的热带滨海旅游城市三亚市天涯镇西侧。东有天涯海角,西有南山寺,地理位置优越、环境优美。

三亚南天生态大观园是以山峦、原始森林、碧海为景观骨架,热带雨林、奇石、溪瀑、名贵兰花景观为主体,先进的生态科技为支撑,天人合一的生态文脉为特色。融游览观光、休闲健身、科普环保、学术研究等功能于一体的高科技生态旅游圣地。

### 南海情山 鹿回头公园

鹿回头公园座落在三亚西南端鹿回头半岛内,1989 年建成开放,总面积 82.88 公顷,有大小五座山峰,最高海拔 181 米。公园三面环海,一面毗邻三亚市区,是登高望海和观看日出日落的制高点,也是俯瞰三亚市全景的唯一佳处。

鹿回头有一个海南黎族美丽的爱情传说:古代一位英俊的黎族青年猎手,头戴红巾,手持弓箭,从五指山翻越九十九座山,涉过九十九条河,紧紧追赶着一只坡鹿来到南海之滨。前面山崖之下便是无路可走的茫茫大海,那只坡鹿突然停步,站在山崖处回过头来,鹿的目光清澈而美丽,凄艳而动情,青年猎手正准备张弓搭箭的手木然放下。忽见火光一闪,烟雾腾空,坡鹿回过头变成一位美丽的黎族少女,两人遂相爱结为夫妻并定居下来,此山因而被称为“鹿回头”。根据这个美丽爱情传说而建造的海南全岛最高雕塑“鹿回头”已成为三亚的城雕,三亚市也因此得名“鹿城”。

如今,鹿回头已定位为情爱文化和生态展示并重的主题公园,主要景点包括顺风台、鹿苑、滑道、紫气东来、情爱文化园、黎族歌舞表演、鹿回头雕塑、山顶花园、北亭观景台等,这里还是三亚市区森林植被自然保护区的核心地带,属常绿热带季雨林生态类型,植物种类丰富,有许多国家级和海南省特有物种。

### 白鹭公园

在三亚除了各处景区,分布在城市周围几个公园也是一道靓丽的风景线。其中白鹭公园就是一个很值得去的地方。

白鹭公园位于三亚的二环路上,由于离居民区较远,公园内游人一直很少。也许正是因为这个原因,白鹭才能悠然的在园内的湖边来回走动。春光明媚,坐在公园里的草坪上,望着远处的青山、空中时尔翩翩的白鹭,那种春的感觉油然而生。你也可以买卖上一个风筝,系上自己的心情,让它放飞在那蓝天下、、、

白鹭公园临着三亚河,几棵高高的椰子树把头伸向河面,仿佛和生长在河里的经树林在亲密的交谈。坐在河边的小亭子里,你肯定会感叹河对面的喧嚣与公园里的安静形成的鲜明对比。公园除了一览三亚河的风景,还有一个白鹭湖位于公园中间,这里是白鹭的天堂,湖边、湖心到处是白鹭。

白鹭湖上的小桥,湖边种植的竹子不禁让人想到江南。如果是在细雨中游白鹭公园,我想那种感觉肯定更 HIGH!

## 市郊及周边

### 呀诺达雨林文化旅游区

呀诺达雨林文化旅游区位于三亚市郊,海榆中线三亚至保亭方向 18 公里处,距离三亚市中心仅 35 公里。在景区的观景台可眺望海棠湾、蜈支洲岛、南湾猴岛,形成了与众不同的区位优势。景区以展现热带雨林景观为核心,融汇生肖文化、雨林图腾、民俗风情于一体,集生态旅游、度假休闲为一身,营造热爱自然、感受自然、回归自然的文化氛围,打造吃、住、行、游、购、娱复合型国际休闲度假旅游社区。

呀诺达雨林文化旅游区由海南三道圆融旅业有限公司投资开发,景区总规划面积 45 平方公里,周边是 123 平方公里的生态恢复保护区,总投资为 39 亿人民币。公司采取分期建设、滚动发展原则,计划实施的项目有:呀诺达雨林山谷、呀诺达经石峡谷、生肖广场、啪鲁迪野外拓展训练、哇哎鲁蜜月山庄、亲达达养生庄园、呀呀呀热带果乡、达达瑟黎苗博览、“梦回呀诺达”大型演艺,以及相配套的高级私密度假别墅和大众化消费水平的 3B 酒店等。

### 三亚美天涯热带海洋世界

三亚美天涯热带海洋世界融海洋智慧、生命与灵气。别走九洲、不下五洋,百岁神龟也在我们身边倘佯;当欢喜的鸟儿立手中、肩上、依偎在身旁,仿佛又回到了少年的玩陶时光;鱼中神仙、蝴蝶、珊瑚、海葵.....悠悠荡荡,含蓄飘逸着缤纷生命的久远绵长。群鳄争食、鲨口硕利,感叹着生存脆弱的忧伤;海豚聪慧、海狮顽皮、海豹热情、海獭灵巧,湿漉漉、滑腻腻、软绵绵的一个吻,热恋的情人顿感迷茫。

### 博鳌亚洲论坛永久会址

博鳌亚洲论坛国际会议中心是博鳌亚洲论坛的永久会址，于 2003 年 9 月 22 日在海南博鳌正式启用，江泽民为国际会议中心题名。

国际会议中心位于博鳌水城内的东屿岛上，与万泉河入海口遥遥相望。国际会议中心正面是两个大型喷水池，其中圆台形喷水池中间是一个地球仪，流水瀑布般地从地球仪下倾泻而出；从空中俯瞰，圆形的会议中心与弓形的索菲特大酒店巧妙组合，就像一艘万吨巨轮上的大铁锚；也有人认为它更像蓄势待发的弓箭。会议中心与五星级的索菲特大酒店建筑面积分别为 3.8 万平方米和 5.3 万平方米。

圆形的会议中心就像一枚古钱币，外圆内方，象征着包容性与亲和力，没有上下、主次和方向上的高低之分，以体现与会者之间相互的平等。

拥有 439 套客房的索菲特大酒店与会议中心廊道相连，酒店客人参加会议不受交通、气候条件影响。三层楼的会议中心，分别设有圆形国际会议厅、中小会议室、多功能厅、贵宾厅、展览厅、新闻中心、演艺厅、商务中心及配套设施。

3 千多平方米的国际会议厅，可容纳 2000 人开会。会场的音响、灯光、摄像、翻译等均为电脑全程监控，可同时提供 7 种语言的同声传译服务；会议期间，主会场的视频、音频可以与分会场之间进行相互切换。

在会议中心一楼，东屿宴会厅可容纳 1500 人同时就餐，环宴会大厅有 20 个可容纳 50 人至 200 人的小会议厅。

### **海南热带野生动植物园**

园区设有车行观赏区、步行观赏区、湖边度假区、中心服务区等。其中动物观赏区自然放养珍禽猛兽及热带珍稀濒危动物 200 余种。

游客可乘车在行车观赏区观非洲狮、东北虎、黑熊等猛兽在自然状态下的风采，也可在步行区观赏亚洲象、长颈鹿、鳄鱼、河马、巨蜥、长蟒、鹈鹕、矮马等，还可置身于人造猴山与群猴嬉戏，在具有热带风情的飞禽世界中漫步，观赏各种热带飞禽表演。餐饮备有多种热带风味独特小吃供游客享用。

海南热带野生动植物园一改其它城市动物园高墙铁笼的囚兽格局，让野生动植物拥有热带丛林自由生活的空间，让动物野性得以淋漓展露，尽显各类珍禽异兽的风采，“群狮争食”的血腥、“天下第一猴山”的谐趣、“钓鳄鱼”的刺激、“百鸟争鸣”的壮观、“狮虎恋”的浪漫、植物绞杀的残酷……您都可以在园区内一览无余。

### **兴隆热带植物园**

兴隆热带植物园位于海南省东南部。穿过万宁市兴隆温泉旅游区，我们便进入了一个绿色的世界，这就是兴隆热带植物园。植物园创建于 1957 年，由中国热带农业科学院香料饮料研究所开发管理，占地面积 42 公顷，汇集有 1200 多种热带植物，是一座集科研、科普、生产、加工、观光和种质资源保护为一体的综合性热带植物园。

### **西岛海上游乐世界**

西岛又名玳瑁岛，位于三亚湾国家自然保护区内，全岛面积 2.8 平方公里，居民 3 千多人口，世代打渔为生。距三亚 8 公里，市内坐艇 25 分钟路程，珍珠养殖厂码头坐艇 15 分钟路程。由于远离城市，海水污染少，岛上风景秀丽，空气清新，沙滩柔和，海水清澈见底；环岛海域生长着大量美丽的珊瑚，保护完好，聚集生活着各种色彩斑斓的热带海鱼，宛如一个巨大的热带海洋生态圈，是一个休闲度假的好地方。西岛海上游乐世界集各种海上休闲娱乐运动于一身，利用西岛优越的自然条件，开发建设了海域面积达 平方公里的一流的活动中心，旨在为游客提供一个充满热带风情、刺激而悠闲的休闲度假天地。目前，游乐世界有：钓鱼潜水、摩托艇、滑水、空中拖伞、帆船、香蕉船、海漫步、玻璃船底观光等游乐项目。