# REPORT ON THE 10TH CSA COMPUTER-SHOGI CHAMPIONSHIP

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## 1. INTRODUCTION

This year the CSA Computer Shogi Championship was already held for the 10th time. There were no special celebrations, which was a little surprising, since the CSA tournament has come a long way since the first tournament in 1990. For one thing, in 1990 there were only six programs competing, while this year there were 45 participants. With an early entry count of 60 it was hoped that the magic number of 50 participating programs would be reached, but in the end there were too many programs that could not be finished in time. Still, there were five more programs than last year, so the steady increase continues. It was surprising that MORITA SHOGI was not among the entries. MORITA SHOGI had participated in all of the previous CSA tournaments, winning the second tournament in 1991 and ending in second or third place several times. A bad result last year was followed by a busy year without time to improve the program. Morita therefore decided not to enter, but promised to be back next year.

This year the tournament was held over three days for the first time. The first day was for the first preliminary stage of seven rounds of accelerated Swiss from which eight programs would advance to the second preliminary stage on the second day. The second preliminary was a nine round accelerated Swiss tournament with the top five programs qualifying for the final day. On the final day the three best programs from last year (KANAZAWA SHOGI, YSS and SHOTEST) and the five programs that qualified from the second preliminary stage would play a round robin tournament to decide the winner of the tournament.

Like in the previous years, the final day was open to the public and comments on the games were given by professional shogi players. This year the comments were by Katsumata (5-dan) and Kitahama (6-dan). Katsumata is very interested in computer shogi and is at the CSA tournament almost every year, even when he was still an apprentice professional in the *shoreikai* [1]. Kitahama was there for the first time and admitted that he had no idea what was going in computer shogi and that he would take the opportunity to learn more about the strengths and weaknesses of the programs.

The number of non-Japanese entries had not increased over last year. Unfortunately (like last year) Don Beal and Martin Smith had to withdraw a couple of weeks before the tournament, so the foreign programs were SHOTEST by Jeff Rollason (England), KCC (North Korea), SHOCKY by Pauli Misikangas (Finland) and my program SPEAR. Based on the results in the past two years (two consecutive third place finishes), Jeff's SHOTEST was expected to do very well and in my opinion was even a dark horse for winning the tournament. The KCC team also seemed very confident at the start of the tournament.

## 2. THE FIRST PRELIMINARY STAGE

The first preliminary stage was played with 26 programs of very different levels. First year entries with all kinds of problems were playing strong programs that had been tuned and tested for a long time. Still, this

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[1]The *shoreikai* is a kind of shogi school that all players who want to become a professional shogi player have to enter. Age limits are very strict and a choice for a career as a professional player has to be made at a very young age. Most players enter when they are about 12 years old. It is impossible under the current system to enter the Shoreikai when a player is older than 20.

| No | Program Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Pt | SOS | SB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *1 | Ryu no tamago | 11+ | 21+ | 4+ | 2+ | 15+ | 3+ | 7+ | 7.0 | 31.0 | 31.0 |
| *2 | Isobe Shogi | 24+ | 11+ | 6+ | 1- | 5+ | 9+ | 4+ | 6.0 | 31.0 | 24.0 |
| *3 | SPEAR | 23+ | 17+ | 20+ | 5+ | 7+ | 1- | 8+ | 6.0 | 26.5 | 19.5 |
| *4 | Shocky 3 | 8+ | 16+ | 1- | 10+ | 9+ | 15+ | 2- | 5.0 | 31.5 | 18.5 |
| *5 | Ojiro | 12+ | 20+ | 17+ | 3- | 2- | 8+ | 15+ | 5.0 | 28.5 | 16.5 |
| *6 | Gekisashi | 26+ | 9+ | 2- | 20+ | 8- | 16+ | 10+ | 5.0 | 23.0 | 13.0 |
| *7 | Yamada Shogi | 19+ | 18+ | 11+ | 15= | 3- | 13+ | 1- | 4.5 | 30.5 | 14.0 |
| *8 | Sakashita Shogi | 4- | 25+ | 19+ | 18+ | 6+ | 5- | 3- | 4.0 | 28.0 | 12.0 |
| 9 | Suzu no ne | 25+ | 6- | 18+ | 17+ | 4- | 2- | 16+ | 4.0 | 26.0 | 10.0 |
| 10 | Kiraku | 16+ | 23+ | 15- | 4- | 13+ | 12+ | 6- | 4.0 | 25.5 | 12.0 |
| 11 | TACOS | 1- | 2- | 7- | 23+ | 22+ | 20+ | 17+ | 4.0 | 25.5 | 8.0 |
| 12 | Ujiie Shogi | 5- | 15- | 21+ | 24+ | 19+ | 10- | 18+ | 4.0 | 21.5 | 9.0 |
| 13 | Sexy ai chan | 20- | 26+ | 23+ | 14+ | 10- | 7- | 21+ | 4.0 | 17.5 | 7.0 |
| 14 | Fuku Shogi | 18- | 24+ | 25+ | 13- | 16- | 19+ | 23+ | 4.0 | 16.0 | 6.0 |
| 15 | Suzuki Shogi | 22+ | 12+ | 10+ | 7= | 1- | 4- | 5- | 3.5 | 31.5 | 10.0 |
| 16 | DNA Shogi | 10- | 4- | 22+ | 21+ | 14+ | 6- | 9- | 3.0 | 26.0 | 8.0 |
| 17 | Tsubakihara Shogi | 21+ | 3- | 5- | 9- | 24+ | 22+ | 11- | 3.0 | 24.0 | 5.0 |
| 18 | Yokoyama Shogi | 14+ | 7- | 9- | 8- | 20+ | 24+ | 12- | 3.0 | 23.5 | 7.0 |
| 19 | Piece Captor | 7- | 22+ | 8- | 26+ | 12- | 14- | 25+ | 3.0 | 19.5 | 3.0 |
| 20 | Shuto Shogi | 13+ | 5- | 3- | 6- | 18- | 11- | 26+ | 2.0 | 27.0 | 4.0 |
| 21 | Nagayoshi Shogi | 17- | 1- | 12- | 16- | 25+ | 26+ | 13- | 2.0 | 22.0 | 1.0 |
| 22 | Shogi Moba | 15- | 19- | 16- | 25+ | 11- | 17- | 24+ | 2.0 | 18.5 | 2.0 |
| 23 | Hello Baba Shogi | 3- | 10- | 13- | 11- | 26+ | 25- | 14- | 1.0 | 23.0 | 0.0 |
| 24 | Aoi | 2- | 14- | 26+ | 12- | 17- | 18- | 22- | 1.0 | 22.0 | 0.0 |
| 25 | Kikuchi 1400 | 9- | 8- | 14- | 22- | 21- | 23+ | 19- | 1.0 | 20.0 | 1.0 |
| 26 | U10 Ver.2 | 6- | 13- | 24- | 19- | 23- | 21- | 20- | 0.0 | 18.0 | 0.0 |

**Table 1**: Results of the First Qualification Round.
* Ryu no tamago, Isobe Shogi, SPEAR, Shocky 3, Ojiro, Gekisashi, Yamada Shogi and Sakashita Shogi qualify for the second qualification round.

stage was dominated by a program that entered for the first time. Ryu no Tamago (*Dragon's egg*) won all its games, most of them in superior style. In the sixth round it completely destroyed my program SPEAR, which was undefeated at that point as well. Ever since there have been two qualification rounds in the CSA tournament, there has been a program that advanced to the final from the bottom class. This year it seemed that Ryu no Tamago was the prime candidate.

Second place with six wins and one loss was shared between Isobe Shogi and SPEAR. Isobe Shogi was a second year entry, not doing well at all last year. A year of work vastly improved the program and it easily qualified for the next stage this year. My program SPEAR did a little bit better than expected. Because of all kinds of other obligations, I had not been able to work on the program as much as I wanted. Test results before the tournament were not so good and the new program did not even have such a good winning percentage against last year's version. Therefore, I was happy to qualify so easily after coming very close last year. Shocky, the second foreign entry in action on the first day, also qualified with five wins and two losses. Pauli actually looked a bit disappointed, as Shocky had chances to win both the games it lost.

Ojiro, Gekisashi, Yamada Shogi and Sakashita Shogi were the other programs that qualified for the next stage. I was happy that Sakashita Shogi went through despite losing to SPEAR in the final round. Last year I blocked Shocky's path to the next round, and I know how disappointing it is to barely miss qualification. Tough luck this year for TACOS, the program of the students of Shizuoka University. They were paired against Ryu no Tamago, Isobe Shogi and Yamada Shogi in the first three rounds. They lost these three games, won the remaining four but came up just short of qualification.

| No | Program Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Pt | SOS | SB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *1 | IS SHOGI | 17+ | 7+ | 16+ | 2+ | 3+ | 4+ | 9+ | 8- | 6+ | 8.0 | 49.5 | 44.5 |
| *2 | KAWABATA SHOGI | 19+ | 6+ | 13+ | 1- | 4- | 10+ | 16+ | 3+ | 7+ | 7.0 | 49.0 | 34.0 |
| *3 | KFEND | 22+ | 18+ | 15+ | 13+ | 1- | 6+ | 4+ | 2- | 10+ | 7.0 | 46.0 | 31.0 |
| *4 | KAKINOKI SHOGI | 21+ | 14+ | 18+ | 15+ | 2+ | 1- | 3- | 7+ | 8+ | 7.0 | 45.0 | 30.0 |
| *5 | SHOCKY 3 | 7- | 17- | 11+ | 21+ | 14- | 16+ | 12+ | 19+ | 13+ | 6.0 | 36.5 | 23.5 |
| 6 | EISEI MEIJIN | 20+ | 2- | 14+ | 17+ | 13= | 3- | 8+ | 9+ | 1- | 5.5 | 47.5 | 21.0 |
| 7 | TANCHO | 5+ | 1- | 23+ | 9- | 12+ | 15+ | 13+ | 4- | 2- | 5.0 | 48.5 | 21.5 |
| 8 | KCC SHOGI | 15- | 11- | 22+ | 19+ | 18+ | 9+ | 6- | 1+ | 4- | 5.0 | 42.5 | 21.0 |
| 9 | GEKISASHI | 14- | 21+ | 20+ | 7+ | 10+ | 8- | 1- | 6- | 11+ | 5.0 | 42.5 | 20.0 |
| 10 | SOUGIN | 13- | 16+ | 19+ | 23+ | 9- | 2- | 14+ | 15+ | 3- | 5.0 | 40.5 | 17.0 |
| 11 | SAKURA | 23- | 8+ | 5- | 12+ | 20+ | 13- | 15+ | 18+ | 9- | 5.0 | 37.5 | 20.0 |
| 12 | SAKASHITA SHOGI | 18- | 22+ | 21+ | 11- | 7- | 17+ | 5- | 16+ | 14+ | 5.0 | 35.0 | 16.0 |
| 13 | RYU NO TAMAGO | 10+ | 24+ | 2- | 3- | 6= | 11+ | 7- | 14+ | 5- | 4.5 | 46.5 | 16.0 |
| 14 | SEKITA SHOGI 6 | 9+ | 4- | 6- | 18+ | 5+ | 20+ | 10- | 13- | 12- | 4.0 | 44.0 | 17.0 |
| 15 | TAKADA SHOGI | 8+ | 23+ | 3- | 4- | 17+ | 7- | 11- | 10- | 24+ | 4.0 | 42.0 | 13.0 |
| 16 | NAZOTEKI DENGI | 24+ | 10- | 1- | 20+ | 23+ | 5- | 2- | 12- | 18+ | 4.0 | 41.0 | 10.0 |
| 17 | HYPER SHOGI 6 | 1- | 5+ | 24+ | 6- | 15- | 12- | 18- | 22+ | 19+ | 4.0 | 38.5 | 13.0 |
| 18 | MARUYAMA SHOGI | 12+ | 3- | 4- | 14- | 8- | 23+ | 17+ | 11- | 16- | 3.0 | 43.0 | 11.0 |
| 19 | SPEAR | 2- | 20- | 10- | 8- | 22+ | 24+ | 21+ | 5- | 17- | 3.0 | 36.0 | 6.0 |
| 20 | S1.5 | 6- | 19+ | 9- | 16- | 11- | 14- | 22+ | 24- | 21+ | 3.0 | 32.5 | 7.0 |
| 21 | MARUDEN SHOGI | 4- | 9- | 12- | 5- | 24- | 22+ | 19- | 23+ | 20- | 2.0 | 35.0 | 4.0 |
| 22 | ISOBE SHOGI | 3- | 12- | 8- | 24+ | 19- | 21- | 20- | 17- | 23+ | 2.0 | 33.0 | 4.0 |
| 23 | OJIRO | 11+ | 15- | 7- | 10- | 16- | 18- | 24+ | 21- | 22- | 2.0 | 32.0 | 7.0 |
| 24 | YAMADA SHOGI | 16- | 13- | 17- | 22- | 21+ | 19- | 23- | 20+ | 15- | 2.0 | 28.5 | 5.0 |

**Table 2**: Results of the Second Qualification Round.
* IS SHOGI, KAWABATA SHOGI, KFEND, KAKINOKI SHOGI and SHOCKY 3 qualify for the finals.

## 3. THE SECOND PRELIMINARY STAGE

The predictions for the second preliminary stage (late at night at the hotel bar with Jeff and Pauli) were that there would not be many surprises. IS SHOGI, EISEI MEIJIN, KAKINOKI SHOGI and KCC would qualify for the finals like they had done last year. The only vacant spot would probably be the one of SOUGIN, which lost all games in the final last year. We would be very wrong.

The second day started with some big upsets as KCC lost both of its first two games against TAKADA SHOGI and SAKURA. Neither of these two programs was expected to reach the final, so there was clearly something wrong with the North Korean program. Last minute testing (a cardinal sin) might have been the reason for this disastrous start. The second round also saw a surprising defeat of EISEI MEIJIN against KAWABATA SHOGI. KAWABATA SHOGI got very close to qualifying for the finals last year, so it was a candidate for one of the five qualification tickets. Still, EISEI MEIJIN had a very good result last year (fourth place) and its programmer Yoshimura again had put a lot of work in the program. Furthermore, it also ran on the fastest hardware in the tournament. A special clocked-up processor gave it a staggering 950 MHz.

From round 5 the battle for qualification really started. There were some interesting match-ups as undefeated IS SHOGI played undefeated KFEND and KAKINOKI SHOGI (also without a loss) played KAWABATA SHOGI (one loss against IS SHOGI). IS SHOGI and KAKINOKI SHOGI won and were now very close to qualification for the finals. A surprising result in the game between EISEI MEIJIN and RYU NO TAMAGO, which ended in a draw by repetition of moves. Because of this result EISEI MEIJIN dropped to 3.5 points from five games and was suddenly in a lot of trouble, not having played IS SHOGI and KAKINOKI SHOGI yet. At the other end of the table, SHOCKY lost against SEKITA SHOGI and a 2-3 score after five rounds seemed to end all hopes of a second European program in the finals.

In round 6 IS SHOGI beat KAKINOKI SHOGI to become the only undefeated program. Even though seven wins were needed to be certain of qualification, six wins would almost certainly be enough with the number of strong opponents IS SHOGI had played. KFEND joined KAKINOKI SHOGI in second place with a win over EISEI MEIJIN, despite running on a laptop that was three times slower. The other programs with a good chance of qualifying were KAWABATA SHOGI, TANCHO, KCC, GEKISASHI and SEKITA SHOGI, all with four wins out of six games.

From round 7 the tournament became a survival match. IS SHOGI made certain of qualification by beating GEKISASHI. Even though GEKISASHI still needs a lot of work, this might be the start of an interesting rivalry, as both programs are made by students of the University of Tokyo, the most prestigious university in Japan. KFEND continued its strong performance with a win over KAKINOKI SHOGI. TANCHO also won and EISEI MEIJIN took its last chance by beating KCC. SEKITA SHOGI dropped from the lead with a loss against SOUGIN.

Round 8 saw the recovery of KCC, beating the undefeated IS SHOGI. With that result KCC took its last qualification chance. KFEND lost to KAWABATA SHOGI, leaving both programs with a 6-2 score. They were joined by KAKINOKI SHOGI, which beat TANCHO. GEKISASHI lost its third game in a row to end all hopes of qualification. With one round left to play, only IS SHOGI was certain of qualification. KAKINOKI SHOGI, KAWABATA SHOGI and KFEND were in a very good position with 6-2 scores. EISEI MEIJIN had 5.5 points and was the other program with its chances in its own hands. The programs with three losses could only win and hope for the best. TANCHO, KCC and SOUGIN were programs that were expected to compete for a spot in the final, but the final program with only three losses was a big surprise: SHOCKY had managed to climb from the bottom of the table to having an outside chance at qualification. So far, of the strong programs SHOCKY had only met TANCHO (and lost), so if it would end with the same score as any other program, it would not qualify because of its low SOS points.

The pairing of the final round showed that there was a problem with the pairing system used in this tournament: IS SHOGI-EISEI MEIJIN, KAWABATA SHOGI-TANCHO, KFEND-SOUGIN, KAKINOKI SHOGI-KCC and SHOCKY-RYU NO TAMAGO. This was a very lucky outcome for SHOCKY, as it meant an outside chance of qualification for the final. If all five games would end in SHOCKY's favour (i.e. a win over RYU NO TAMAGO and wins of IS SHOGI, KAWABATA SHOGI, KFEND and KAKINOKI SHOGI) SHOCKY would be in the final as the only program with a 6-3 score! This is exactly how it turned out, even though SHOCKY had a roller coaster game against RYU NO TAMAGO before it finally won.

Pauli was of course the happiest man in the Sheraton Hotel at that moment, probably including the couple that were getting married that day in the Sheraton church next to the tournament hall. EISEI MEIJIN was the victim of the pairing system used, but Yoshimura will have realised that if EISEI MEIJIN would not have settled for a draw in the game against RYU NO TAMAGO there would have been no problem in qualifying. The KCC team will also be disappointed, but scoring only five wins from nine games can not be expected to suffice for qualification.

## 4. THE FINAL

Despite Pauli's obvious delight over qualification, Jeff and I still could not stop him from trying to improve his program even on the evening before the finals. In part this was probably out of frustration that a version of SHOCKY that was half a year old was actually playing better than the latest version. Jeff was also slowly starting to feel the pressure building up and was not feeling very confident about the rented PC on which his program was running. The program may be strong, but if the hardware fails, there is nothing you can do. SHOCKY and SHOTEST played a final test game on my 700 MHz PC that Pauli would use in the final (about twice as fast as the laptop he had). SHOTEST won, but it was a long game that lasted until about three in the morning. SHOTEST had a bug in receiving moves combined with thinking in opponent's time, and this must have added a little to Jeff's uneasiness. The results in test games against the strong programs were good, but hardware problems and small bugs like that do not make for a good night's rest.

Predictions about the final as always focussed on KANAZAWA SHOGI, the program that almost always wins. A safe bet, based on five previous tournament victories and three runner-up places. KANAZAWA SHOGI was expected to be challenged by former tournament winners YSS and IS SHOGI. For me, SHOTEST and KAKINOKI SHOGI were dark horses to win the tournament.

The first round seemed to confirm the prediction, as all of the programs mentioned won, except for SHOTEST,

| No | Program Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Pt | SB |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | IS SHOGI | 6+ | 8+ | 3- | 2+ | 5+ | 4- | 7+ | 5 | 15 |
| 2 | YSS 10 | 8+ | 5+ | 6+ | 1- | 3- | 7+ | 4+ | 5 | 14 |
| 3 | KAWABATA SHOGI | 4- | 7- | 1+ | 5+ | 2+ | 8+ | 6- | 4 | 16 |
| 4 | KANAZAWA SHOGI | 3+ | 6- | 5- | 8+ | 7+ | 1+ | 2- | 4 | 13 |
| 5 | KAKINOKI SHOGI | 7+ | 2- | 4+ | 3- | 1- | 6+ | 8+ | 4 | 10 |
| 6 | KFEND | 1- | 4+ | 2- | 7- | 8- | 5- | 3+ | 2 | 8 |
| 7 | SHOTEST 4.0 | 5- | 3+ | 8- | 6+ | 4- | 2- | 1- | 2 | 6 |
| 8 | SHOCKY 3 | 2- | 1- | 7+ | 4- | 6+ | 3- | 5- | 2 | 4 |

**Table 3**: Results of the Final.

which lost a very good position against KAKINOKI SHOGI. However, the second round saw the first major upset as KFEND beat KANAZAWA SHOGI. A second one was almost added to this as SHOCKY came very close to beating IS SHOGI. IS SHOGI had found a 27 ply mate for SHOCKY and also saw that there was no way to defend against that. To prolong the game, it played a check that could be defended in different ways without changing the mating sequence. However, SHOCKY had no special mating search and was unaware of what was going on. In the end it took the safest looking defence against the check, which was the only way that opened an escape route for IS SHOGI's king. Meanwhile, SHOTEST got the point back that it had lost in the first round. KAWABATA SHOGI seemed to have an easy victory and even managed to get a completely safe king. However, instead of trying to attack the SHOTEST king, it kept making the already safe king safer and safer. In the end, KAWABATA SHOGI lost on time. This was a big result as it would turn out.

Things really started to heat up in round three. Only the game between YSS and KFEND went according to expectations as YSS won. All the other three games were surprises. IS SHOGI lost to KAWABATA SHOGI, which it had beaten in the qualifications. KANAZAWA SHOGI lost to KAKINOKI SHOGI, suddenly making another KANAZAWA SHOGI tournament victory very uncertain. For me, the biggest upset was the win of SHOCKY over SHOTEST. It was the first time in numerous test games that SHOCKY managed to beat SHOTEST, but SHOCKY picked the perfect time to do so. A difficult sacrifice turned out to completely destroy SHOTEST's position and everything was downhill from there. There were some people who expected SHOCKY to lose all games, so this win was very important for Pauli to show that despite his lucky qualification he was not out of place in the finals.

Round 4 saw the fall of the final undefeated program as YSS lost to IS SHOGI. This round also saw the other favourites catching up as KANAZAWA SHOGI beat SHOCKY and SHOTEST beat KFEND. This last game was not without incident, as Jeff's fears about his hardware became true. The PC was not working properly and it took him about 30 minutes to get it to work again. His opponent was very courteous in patiently waiting for him to finish instead of trying to claim the game. A good illustration of the atmosphere among the programmers in the tournament. SHOTEST then had not much trouble beating KFEND, first killing all of the opponent's threats and then even all of the potential threats before actually trying to mate the king of the opponent. Katsumata jokingly commented that it would be impossible to sell shogi software that makes no attempt at being friendly, but just completely kills you. KFEND and SHOCKY were no longer title contenders with three losses, but all the other programs had everything to play for.

In round 5 KAWABATA SHOGI was showing its strength again by beating YSS. KAWABATA SHOGI suddenly had become a big title favourite with consecutive wins against IS SHOGI, KAKINOKI SHOGI and YSS and with the relatively easy games against SHOCKY and KFEND still to play. Of course, it needed the help of some other program to beat IS SHOGI, the only program with only one loss after round 5. SHOTEST again was unable to beat KANAZAWA SHOGI, and will have to wait at least another year to become the first non-Japanese CSA champion.

Round 6 showed how close the championship was this year. KANAZAWA SHOGI completely opened up the tournament with one round to play by beating IS SHOGI. Joining these two programs in the lead were YSS (beating SHOTEST) and KAWABATA SHOGI, defeating SHOCKY. These four programs all went into the final round with a chance to win the tournament.

A little calculation showed that despite its bad 1-2 start, KANAZAWA SHOGI had the chances in its own hands. A win over YSS in the final round would mean another CSA crown for Kanazawa. If YSS would win, KAWABATA SHOGI could clinch a tournament victory with a win over lowly ranked KFEND. If both KANAZAWA SHOGI and KAWABATA SHOGI would lose, IS SHOGI would be the winner if it would beat SHOTEST. YSS could only win if KAWABATA SHOGI and IS SHOGI would both lose. YSS was the first to lose its chance after SHOTEST ended a disappointing performance with a crushing defeat against IS SHOGI. Still, a computer program is not influenced by these things and YSS played to its full potential to beat KANAZAWA SHOGI. This meant that the winner would be decided in the game between KAWABATA SHOGI and KFEND. It was only fitting that the tournament ended with a big upset as KFEND beat KAWABATA SHOGI to make IS SHOGI the winner of the 10th CSA tournament. Runner up honours again for YSS and a surprising third place for KAWABATA SHOGI. Kawabata seemed very happy, but he will think a little about what could have been. KAWABATA SHOGI beat almost all the top programs, but lost against two programs with only two wins. All other programs will have to try again from the qualification next year. It will be a tough fight for the five qualification spots. The 11th CSA Shogi Championships promises to be very interesting with KANAZAWA SHOGI in the qualification tournament for the first time, joined by the strong KAKINOKI SHOGI and SHOTEST.

## 5. THE PROGRAMS

**IS Shogi:** The winner and even though it was very close, this was the right result. Losing against KAWABATA SHOGI in the finals was an unexpected glitch, showing that IS SHOGI still has room for improvement. It will be a little harder next year, since the team will again lose a member as Kishimoto is giving preference to a research career at the University of Alberta. Will the duo Tanase and Goto get another one next year?

**YSS:** Yamashita is always very relaxed and cheerful, but being runner-up for the second year in a row must be a little frustrating. At least he finally managed to beat SHOTEST after losing all of their previous three encounters at the CSA tournament. YSS is expected to be a favourite again next year.

**Kawabata Shogi:** Kawabata's program was the revelation of the tournament. It came within a whisker of winning the title, despite the lack of confidence of the programmer who did not even book a hotel for Thursday night, expecting to be stopped at the qualification stage. Kawabata is a very good player himself, once being the Kyoto representative for the top amateur tournament in Japan in his student days. KAWABATA SHOGI has potential to win the tournament and it will be very interesting to see its improvement next year.

**Kanazawa Shogi:** Kanazawa would have won the tournament again if the Kanazawa team had not made the mistake of tuning the program for an opening strategy that could not handle the *anaguma* well. The anaguma is a defensive opening strategy that was used by KAKINOKI SHOGI and KFEND in their victories against KANAZAWA SHOGI. After the opening preference was changed, KANAZAWA SHOGI almost came back to win. For the first time KANAZAWA SHOGI has to play in the qualification next year. No doubt that it will come through and have a go at another title. But then again, my predictions are a kiss of death.

**Kakinoki Shogi:** It is hard to say something good or bad about KAKINOKI SHOGI this year. Its performance lacked colour, not losing any games that it should have won and not winning any games against the top programs. I expected a little more after the tournament victory at the Shogi Forum last June. Perhaps Kakinoki needs to rethink the methods used in his program to have a chance of finally winning the CSA tournament.

**KFEnd:** KFEND had a very good tournament. Clearly a low budget project of the single programmer Arioka, it beat programs like EISEI MEIJIN, KAKINOKI SHOGI and KANAZAWA SHOGI. Arioka can be proud, and hopefully he will have enough free time to improve his program for next year's tournament.

**Shotest:** The performance of SHOTEST was a little disappointing. I honestly believed that Jeff had a chance to win the tournament, and he told me before the tournament that he felt that this year's version was much more stable than last year's SHOTEST. In the end, Jeff had to settle for only two wins. Still, I think that the luck that lifted him to third place in the final round of last year's tournament was evening out this year. He had a very good position against KAKINOKI SHOGI and it must have been tough to lose to SHOCKY after winning all previous test games. However, it is not in Jeff's character to be disappointed for long and I am sure that SHOTEST will be very tough to beat again next year.

**Shocky:** This year SHOCKY was the program that managed to get from the lowest qualification group to the finals. It was clear to everyone that SHOCKY was very lucky to be in the finals. The tournament system failed to even out the strength of the opponents of each program. Therefore, it was very important to Pauli to show that he deserved to be in the final despite the relatively weak opposition in the qualification. Wins against SHOTEST and KFEND showed that SHOCKY is a strong program and a new European rival for SHOTEST. I wonder if Jeff and Pauli will share the same hotel room again next year.

## 6. CONCLUSIONS

After years of steady improvement in playing strength, I had the distinct feeling that there was not much progress since last year's tournament. Both the second qualification round and the final were very close, indicating that the programs just below the traditional top are catching up. Half of the programs in the final still had a chance to win the tournament at the start of the final round. Another indication that progress is slowing down is the importance of opening strategy. KAWABATA SHOGI, KFEND and KAKINOKI SHOGI all had specialised in the *anaguma*, which is a defensive opening strategy that is hard to win against. This turned out to be the main reason that KANAZAWA SHOGI did not win the tournament this time.

Still, there is hope for something else than marginal improvements. KFEND showed that even on a slow machine it is possible to make a high performance program. I sincerely hope that this will also be visible in the other programs next year and that the current lack of major improvements is not a brick wall, but a small bump in the road to the ultimate goal of beating the strongest human players.