

[Home](#) \* [Engines](#) \* **Booot**



Ukrainian folk costume  
featuring Russian boots <sup>[2]</sup>

**Booot**,  
an [UCI](#) compliant [open source](#)  
[chess program](#) written in [Delphi 6](#)  
by [Alex Morozov](#). Booot  
determines [sliding piece attacks](#)  
with [rotated bitboards](#) and applies  
[PVS](#) with all common search  
improvements such as [null move](#)  
[pruning](#), [late move reductions](#) and  
[IID](#). Booot **6.1**, released in October  
2016, comes with [lazy SMP](#) and a  
completely redesigned [evaluation](#)  
[function](#) <sup>[1]</sup>.

Booot played the [1st Computer](#)  
[Chess Championship of CIS](#)  
[Countries](#), the [CCT9](#) and [CCT10](#),  
and the [CPT 2010](#) and [CPT 2011](#),  
the [WCCC 2011](#), the [ICT 2013](#),  
the [IGT 2015](#), where it became  
runner-up behind [Pedone](#), and the  
[IGT 2016](#), again second place  
behind [Chiron](#).

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## Photos



[WCCC 2011](#), [Booot](#) vs [Junior](#), [Amir Ban](#) and [Alex Morozov](#) <sup>[3]</sup>

```
[Event "WCCC Tilburg 2011"]  
[Site "Tilburg"]  
[Date "2011.11.21"]  
[Round "5"]  
[White "Booot"]  
[Black "Junior"]  
[Result "0-1"]
```

```
1. Nf3 Nf6 2. c4 g6 3. Nc3 Bg7 4. g3 O-O 5. Bg2 d6 6. O-  
O e5 7. d3 Nc6 8.  
Rb1 a5 9. a3 h6 10. b4 axb4 11. axb4 Be6 12. Nd2 Rb8 13. b5 Ne7 14. Ba  
3 Qd7  
15. Ra1 Bh3 16. Qb3 h5 17. Nf3 Bxg2 18. Kxg2 Nf5 19. e4 Nd4 20. Nxd4 e  
xd4  
21. Ne2 c5 22. Bc1 Ra8 23. Ra2 Rfb8 24. Bf4 Ng4 25. h3 Ne5 26. Bxe5 Bx  
e5  
27. f4 Bg7 28. f5 h4 29. gxh4 Qd8 30. fxg6 fxg6 31. Rf4 Be5 32. Rg4 Qf  
6 33.  
h5 Kh7 34. Rxa8 Rxa8 35. Rxg6 Qf7 36. Ng3 Bxg3 0-1
```

## Code snippets

This is how Booot generates bishop attacks with rotated bitboard lookups in v4.15.1 [\[4\]](#)

```
Function BishopsMove(from: integer) : bitboard;
var
    indx : integer;
    temp :bitboard;
begin
    indx:=(AllDh1 shr Dsh1[from]) and MaskDh1[from];
    temp:=RBDh1[from,indx];
    indx:=(AllDa1 shr Dsa1[from]) and MaskDa1[from];
    temp:=temp or RBDa1[from,indx];
    Result:=temp;
end;
```

...and inlined in v5.1.0 [\[5\]](#)

```
Function BishopMovesBB(Square : Tsquare;var Board:Tboard):
TBitBoard;inline;
begin
    result:=RotatedBh1[square,((Board.AllBh1 shr ShiftBh1[square])
and MaskBh1[square])]
        or RotatedBa1[square,((Board.AllBa1 shr ShiftBa1[square])
and MaskBa1[square])];
end;
```

## Forum Posts

### 2005 ...

- [Booot 4.5 games](#) by Milorad Madjar, [CCC](#), March 06, 2005
- [Booot 4.14.0 : 2626 - Cheese 1.1b : 2271](#) by [Patrick Buchmann](#), [CCC](#), January 26, 2008
- [Booot v4.15.0 available from WBEC Ridderkerk](#) by [Leo Dijksman](#), [CCC](#), January 11, 2009
- [Booot 4.15.0 : 2533](#) by [Patrick Buchmann](#), [CCC](#), January 15, 2009

### 2010 ...

- [Booot 4.15.1 : 2515](#) by [Patrick Buchmann](#), [CCC](#), April 02, 2010
- [Xmas SWCR gift: Booot won vs. Hannibal with 3 knights!](#) by [Frank Quisinsky](#), [CCC](#), December 21, 2010
- [Booot 5.1 \(attempt at a 64 bit version\)](#) by [Dann Corbit](#), [CCC](#), January 25, 2011

## 2015 ...

- [Booot 6.0 released](#) by [Graham Banks](#), [CCC](#), July 06, 2016
- [Booot 6.1 released](#) by [Alex Morozov](#), [CCC](#), October 18, 2016
- [Booot 6.2 release](#) by [Alex Morozov](#), [CCC](#), May 08, 2017

## External Links

### Chess Engine

- [Booot's ICGA Tournaments](#)
- [Booot](#) from [WBEC Ridderkerk](#)
- [Booot](#) by [Алексей Морозов](#), [Украина](#)

### Misc

- [Boot \(disambiguation\)](#) from [Wikipedia](#)
- [Nancy Sinatra](#) - [These Boots Are Made for Walkin'](#) (1966), [YouTube](#) Video

## References

1. <sup>^</sup> [Booot 6.1 released](#) by [Alex Morozov](#), [CCC](#), October 18, 2016
2. <sup>^</sup> [Russian boot](#) from [Wikipedia](#)
3. <sup>^</sup> Photo by [Gerd Isenberg](#)
4. <sup>^</sup> [attacks.pas v4.15.1](#) from [Booot](#) from [WBEC Ridderkerk](#)
5. <sup>^</sup> [attacks.pas v5.1.0](#) from [Booot](#) from [WBEC Ridderkerk](#)

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<a href="#">CCT10</a>	May 5, 2013
<a href="#">CCT9</a>	Aug 25, 2013
<a href="#">CPT 2010</a>	Jan 17, 2013
<a href="#">CPT 2011</a>	Dec 1, 2013
<a href="#">Engine releases</a>	Apr 23, 2018
<a href="#">Engines</a>	Mar 10, 2018
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<a href="#">The Baron</a>	Jan 8, 2018
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