

Building TM support in the MS VCC Verifier

The screenshot shows the Microsoft Research website for the project "VCC: A C Verifier". The page features a navigation bar with "Home", "Our Research", "Connections", "Careers", and "Hub". Below the navigation bar, there are links for "Worldwide Labs", "Research Areas", and "Research Groups". A search bar is located at the top right, and there are icons for "Videos", "Projects", "Publications", "People", and "Downloads". A featured video thumbnail for "Watch Rick Rashid's TechFest Keynote" is visible. The main content area has a breadcrumb trail: "Home > Projects > VCC: A C Verifier". The title "VCC: A Verifier for Concurrent C" is displayed in a large, serif font. Below the title is a green checkmark logo with "VCC" in bold black letters. A paragraph of text describes the tool: "VCC is a tool that proves correctness of annotated concurrent C programs or finds problems in them. VCC extends C with design by contract features, like pre- and postcondition as well as type invariants. Annotated programs are translated to logical formulas using the Boogie tool, which passes them to an automated SMT solver Z3 to check their validity." At the bottom, a note states: "VCC is available for non-commercial use, with sources, at our codeplex site." Social media icons for Twitter, Facebook, LinkedIn, and others are also present.

- Support atomic TM blocks in VCC

```
atomic {  
  x = y;  
  y = z + t;  
}
```

- Support relaxed conflict detection in TMs

```
atomic (!WAR) {  
  x = y;  
  y = z + t;  
}
```